

DOCUMENT RESUME

ED 380 867

EA 026 574

AUTHOR Galvin, Patrick F.; And Others
TITLE The Status of Public Education in Utah: An Overview of Issues. 1992-93. The Conditions of Education in Utah.
INSTITUTION Utah Univ., Salt Lake City. Utah Education Policy Center.
PUB DATE Jan 93
NOTE 141p.; For 1993-94 report, see EA 026 575.
PUB TYPE Reports - Evaluative/Feasibility (142)
EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Curriculum Development; Demography; Educational Assessment; Educational Finance; *Educational Trends; Elementary Secondary Education; Fiscal Capacity; Governance; Labor Conditions; *Public Education; School Personnel; Special Needs Students; *State Programs; State School District Relationship; State Standards; *Statewide Planning
IDENTIFIERS *Utah

ABSTRACT

This document provides an overview of the status of public education in Utah for the year 1992-1993. Chapter 1 provides a general description of the state structures that organize and control public education and identifies significant trends and developments that will affect these structures. Chapter 2 describes Utah's demographic characteristics relative to national averages and provides rural-urban comparisons. The third chapter describes the Utah Core Curriculum and graduation requirements and discusses how these standards have influenced patterns of courses taken by students. Special instructional programs and services for Utah's at-risk students are described in the fourth chapter. Chapter 5 provides a historical examination of Utah's assessment and evaluation programs, an analysis of statewide testing data since 1990, and an examination of the current trends and issues in evaluation. The sixth chapter provides background demographics of education personnel in the state, highlights major state issues and initiatives of the last decade, and identifies future personnel-related issues. The structure of Utah's school finance plan--specifically, the sources of fiscal disparity among school districts and efforts to remedy them--is described in the final chapter. Utah's tax burden is compared with that of other states. Thirty-six tables and 3 graphs are included. (LMI)

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CONDITIONS OF EDUCATION IN UTAH

The Status of Public Education in Utah: An Overview of Issues

Editors
Patrick F. Galvin
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University of Utah
Salt Lake City, Utah

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The Status of Public Education in Utah: An Overview of Issues

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Published by the Utah Education Policy Center
Graduate School of Education
The University of Utah
Salt Lake City, Utah
January, 1993

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FOREWORD

This is the first edition of Conditions of Education in Utah, which this year is entitled, "The Status of Public Education in Utah: An Overview of Issues, 1992-1993." It has been produced by the Utah Education Policy Center, which is a part of the Graduate School of Education at the University of Utah. Included in this year's publication are chapters on governance, demography, curriculum, special programs, performance assessment, personnel, and finance. The material contained in these chapters should be of interest and help to virtually anyone concerned about the current condition and status of public education in Utah. Although specifically designed to be a source of information for policy makers involved with public education as well as professional educators working within the system, this publication should be of assistance to the media, parents, businesses, and those outside the state seeking knowledge about the state's public educational system.

The idea of an annual "Conditions of Education" publication is not original with the Utah Education Policy Center. Similar publications have begun to be produced by university based educational policy centers in other parts of the country. These efforts, as noted by the California policy group (PACE), are generally aimed at accomplishing the following goals: (1) to collect and distribute objective information about the conditions of education, (2) to analyze state educational policy issues and the policy environment, (3) to evaluate school reforms and state educational practices, (4) to provide technical support to policy-makers, and (5) to facilitate discussion of educational issues.

This year's document consciously attempts to build a foundation upon which future editions will be based. Each chapter takes the time to describe a significant part of the "Utah Public Education System." Issues are addressed and in many cases critically analyzed. It is anticipated that in future years the publication will focus more sharply upon selected issues, expand the number of topics addressed, and include special features. Readers' written suggestions and observations are most welcome. Please send your comments to the Utah Education Policy Center, c/o the Department of Educational Administration, 339 Milton Bennion Hall, University of Utah, Salt Lake City, Utah 84112.

This document is based on public information, data which have been collected by public and private agencies, publications by researchers and other experts in the field of education and related disciplines, as well as original data that have been collected and analyzed by the contributing authors. These sources are noted throughout the text. The analysis and conclusions in this publication are those of the authors and are not necessarily endorsed by the Utah Education Policy Center, the Graduate School of Education, or the University of Utah.

Patrick F. Galvin
David J. Sperry
Editors and Co-Directors of the Utah Education Policy Center

ACKNOWLEDGMENTS

The publication The Status of Public Education in Utah: An Overview of Issues, 1992-93, has been assisted by generous support of numerous individuals and organizations. Dean Blankenship has provided a supportive environment at the School of Education, University of Utah, which has enabled this type of publication. External readers, Dr. Richard Kendell, Dr. John Bennion, Dr. Hal Robins and Mr. Jim Wilson all reviewed the document and contributed many fine suggestions for improving the document. While these readers deserve appreciation for their assistance they should not be held accountable for any of the shortcomings of the product.

Individual authors collected data and advice for their chapters from many sources. Some of the individuals who contributed their time, expertise and support are listed below from their respective institutions

Utah State Office of Education:

Stevan Kukic, Mary Anne Williams, Les Haley, Jay Jeffreys, Diana Cortez, Linda Alder, Richard Burbidge, Dave Nelson, Roger Mouritsen, Bonnie Morgan.

State Division of Substance Abuse Services:

Al Sherwood.

University of Utah:

Harry Bluhm, Susan Sheridan, Andrea McDonnell, Robert Hill, France Rimli-Shortridge.

Most importantly, however, individual authors contributed enormous amounts of their time and effort researching and writing chapters for the publication. These efforts are dedicated to the educational community. It is hoped that this volume and future publications will contribute to the well being of public education in Utah and more, the education of Utah's children.

CHAPTER ONE: THE ORGANIZATION AND CONTROL OF PUBLIC EDUCATION IN UTAH

By: David J. Sperry and Bob L. Johnson, Jr.

Governance of Utah's system of public education is more complex and interactive than might first appear. Linkages of coordination and control extend from the state house to the school house. While varying in strength, such linkages are comprised of a multitude of actors and agencies, each with its own set of roles, responsibilities, and interests. Standing above the state's 450,000-plus students are the legislature, a governor, the State Board of Education, a chief state school officer, the State Department of Education, hundreds of local board members, district superintendents, principals, teachers, and a vast array of special services. In addition to these key educational policy-makers, a variety of special interest groups at both state and local levels press for influence and control over the policy-making process.

The purpose of this chapter is two-fold: 1) to provide the reader with a general description of the organization and control of public education² in Utah; and 2) to identify significant trends and developments in the state that

HIGHLIGHTS

- * There are 40 local school districts in Utah serving 461,259 students (1992-93 school year). These districts range in size from 11 to 79,575 students.
- * Three districts in Utah--Granite, Jordan, and Davis--are among the 60 largest in the nation. Approximately 45% of Utah's students are enrolled in these three districts.
- * During the 1991-92 academic year there were 769 public schools in Utah: 445 elementary schools, 114 junior high and middle schools, 98 high schools, and 112 special schools.¹
- * The majority of Utah schools follow the traditional academic calendar. However, in response to growing enrollments, 10 districts have established year round schools. Approximately 16% of Utah's students attend year-round schools.
- * The "Utah State Public Education Strategic Plan, 1992-1997" represents a major effort to improve public education in Utah and would appear to be the blueprint for future changes in Utah's system of public education.
- * In an effort to improve its representativeness and effectiveness, the size and method of nominating individuals to the State Board of Education has changed significantly.
- * The passage of the "Coordinated Services for At Risk Children and Youth Act" by the 1989 Utah Legislature represents an attempt to improve the delivery of educational services through the collaborative efforts of multiple social agencies.
- * In an effort to ensure the prudent management of monies, the 1992 Utah Legislature enacted laws to protect the interests of public education in the management of school trust funds.
- * Utah has one of the highest student/teacher ratios in the nation. In an effort to reduce this ratio, the State has recently appropriated funds to systematically reduce class size.

1 These figures were derived from the 1991-92 School Director published by the Utah State Office of Education.

2 Throughout this chapter "public education" is used in reference to the K-12 educational system in Utah.

David J. Sperry is Chair and Associate Professor, Department of Education Administration, University of Utah;
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will have an impact on this structure in the immediate future. To accomplish these purposes, the chapter is divided into two major sections. The first section provides an overview of Utah's public education system, the second addresses recent trends and developments.

OVERVIEW

CONSTITUTIONAL PROVISIONS

The Utah Constitution mandates that the legislature provide for the establishment of a state educational system. This includes both a public education system and a system of higher education.³ The public school system must be open to all children of the state and include public elementary and secondary schools and such other schools and programs as the legislature may choose to designate. Public elementary and secondary schools are to be free, although the constitution authorizes the imposition of legislatively authorized fees in secondary schools.⁴ Both systems must be free from sectarian control⁵ No religious or partisan test or qualification may be required as a condition of admission, attendance, or employment in the state's education systems.⁶

Constitutionally, the general control and supervision of the public education system is vested in a State Board of Education whose membership must be established and elected as provided by statute.⁷ The constitution further establishes the office of a State Superintendent of Public Instruction who is to be appointed by the State Board of Education and who serves as the executive officer of the board.⁸

CENTRAL STATE ACTORS

Legislature

On the basis of constitutional authority, the state legislature is the central and legally most powerful educational policy-making body in Utah. The Utah Legislature is comprised of 104 members who meet annually, 75 in the House of Representatives⁹ and 29 in the Senate.¹⁰ All 75 Representatives are elected every 2 years.¹¹ Senators are elected to 4 year terms with approximately half being selected every 2 years.¹² The legislature meets in annual sessions which are not to exceed 45 calendar days.¹³ The legislature may be called into extra (special) sessions by the governor.¹⁴ These sessions may only consider those matters the governor designates.¹⁵

3 Constitution of Utah, Article X, section 1
 4 Constitution of Utah, Article X, section 2
 5 Constitution of Utah, Article X, section 1
 6 Constitution of Utah, Article X, section 8
 7 Constitution of Utah, Article X, section 3
 8 Ibid.
 9 Utah Code 36-1-4(3)
 10 Utah Code 36-1-1(3)
 11 Constitution of Utah, Article VI, section 3
 12 Constitution of Utah, Article VI, section 4
 13 Constitution of Utah, Article VI, section 16

Organization and Control

Currently the Senate has 10 standing committees, one of which is concerned with education. Much like the Senate, the House has an equal number of standing and education committees.¹⁶ Between sessions there are corresponding interim committees that meet jointly. These committees, which include a joint public education committee, are authorized to "meet after adjournment sine die of each general session to organize and plan study programs."¹⁷

Appropriations matters in the Utah legislature are handled by Joint Appropriations Committees. There are currently nine Joint Appropriations subcommittees, one of which deals with public education. All appropriations are brought together by the Executive Committee; the senator and representative who co-chair this committee are in a position to exercise great influence.¹⁸

Governor

Since the Utah Constitution places the general control and supervision of the public education system in the hands of the State Board of Education, the administration of public education is not part of the governor's cabinet or executive departments under his/her direct management. However, the governor is able to exercise control over public education in a variety of ways. These include the following: 1) the selection of the State Board of Education Nominating Committees, the selection of the two final candidates in each of the state board district elections,¹⁹ and the appointment of individuals (with the consent of the State Senate) to fill vacancies on the State Board of Education;²⁰ 2) the power to appoint individuals to other boards that indirectly affect education, e.g., State Lands Trust Board; 3) the power to investigate (when the legislature is not in session) any executive office or state institution;²¹ 4) the power to recommend legislation²² including funding and to call extra sessions of the legislature;²³ 5) the power to approve or disapprove legislation;²⁴ and 6) the power, by virtue of the office, to help shape public opinion.

State Board of Education

The number and method of selection of members of the Utah State Board of Education has changed several times over the years. Effective, January 1, 1993, the number of board members was expanded from 9 to 15.²⁵ Each member is elected on a nonpartisan ballot²⁶ by the voters in distinctive

14 Constitution of Utah, Article VII, section 6

15 Ibid.

16 Utah Code 36-12-2

17 Utah Code 36-12-3. (see Utah Code 36-12-5 for specific duties of Interim Committees)

18 See, State of Utah Directory: Forty-ninth Legislature 1991-1992 compiled and published by US West Communication

19 Utah Code 53A-1-103

20 Utah Code 53-A-1-104

21 Constitution of Utah, Article VII, section 5(2)

22 Constitution of Utah, Article VII, section 5(3)

23 Constitution of Utah, Article VII, section 6

24 Constitution of Utah, Article VII, section 8

25 Utah Code 53A-1-101 (1)(a)

26 Ibid.

geographical districts.²⁷ State school board members serve for 4 years²⁸ with nearly half of the designated districts holding an election every 2 years.

The state constitution charges the State Board of Education with the general control and supervision of the public education system and the responsibility to appoint a State Superintendent of Public Instruction.²⁹ All other duties and powers emanate from statutory authority.

Superintendent of Public Instruction

The State Superintendent of Public Instruction has limited formal powers. Although a constitutionally created office,³⁰ the state superintendent is appointed by the State Board of Education and serves at the will and pleasure of the board. Statutorily, the state superintendent is to administer all programs assigned to the board, but in accordance with policies, procedures, and standards established by the board.³¹ The state superintendent is also charged by statute to serve as an advisor to local superintendents and local boards of education in all matters involving the welfare of the schools.³² When requested by local school superintendents or other school officers, the state superintendent is to provide written opinions on questions of public education, policy, and procedures, but not upon questions of law.³³ Opinions on questions of law may be secured by the state superintendent from the state attorney general.³⁴

LOCAL SCHOOL DISTRICT CHARACTERISTICS

Utah, like 48 other states (Hawaii and the District of Columbia being the sole exceptions), has established a network of local school districts that serve as state agencies at the local level to administer public education. As creations of the state, local school districts can be dissolved, expanded, or modified as the legislature deems appropriate. Current statutory provisions also allow local school board members or local citizens to initiate action that can result in the consolidation or restructuring of school districts.³⁵

At present, there are 40 local school districts in Utah serving 461,259 students. These districts range in student population size from 191 in Daggett School District to 79,575 in the Granite School District.³⁶ Three districts in Utah--Granite, Jordan, and Davis--are among the largest in the nation.

27 Utah Code 53A-1-101 (1)(b)

28 Utah Code 53A-1-101 (6)(a) and (b)

29 Constitution of Utah, Article X, section 3

30 Ibid.

31 Utah Code 53A-1-301 (1)

32 Utah Code 53A-1-303 (1)

33 Utah Code 53A-1-303 (2)

34 Utah Code 53A-1-303 (3)

35 Utah Code 53A-2-102

36 Enrollment Report of Utah Public and Private Schools, October 1, 1992. Utah State Office of Education, November 1992.

Organization and Control

Taken together, 45% of all students in the state attend one of these three school districts.³⁷ The 40 districts are all unified districts offering programs from kindergarten through twelfth grade.³⁸

With the exception of Salt Lake City School District, all 40 districts are governed by a five-member board.³⁹ The Salt Lake City District has a seven-member board.⁴⁰ In addition, stipulations regarding a nonvoting student member are provided by state statute.⁴¹ Regular school board members are elected from separate and distinct geographical precincts within the geographical boundaries of their school district.⁴² Local boards regulate the day to day management and operation of schools,⁴³ but in so doing serve two groups. First, they represent the local patrons who have elected them. Second, they serve as implementors of state laws and regulations governing public education. Since local boards have no inherent powers, they must look to enabling legislation and administrative directives from the State Board of Education for their legal responsibilities and authority.

Local boards are statutorily directed to appoint a district superintendent of schools⁴⁴ and a district business administrator.⁴⁵ The superintendent serves as the board's chief executive officer.⁴⁶

SCHOOL CHARACTERISTICS⁴⁷

During the 1991-92 academic year there were 769 public schools in Utah. These include 445 elementary schools, 114 junior high and middle schools, 98 high schools, and 112 special schools. Although there are 23 (excluding special schools) different organizational configurations among Utah public schools, the great majority of schools would be classified as elementary, junior or middle schools, and high schools. The most common format within the state at each of these levels is as follows:

Elementary:	K-5 or K-6;
Junior High/Middle:	7-9, 6-8, or 7-8;
High School:	10-12 or 9-12.

Although accounting for only about one percent of the student population, there are some 21 schools that follow a 7-12 organizational structure. These schools are found exclusively in rural Utah and their average enrollment size is only 219. As illustrated in Table 1.1, the average school

-
- 37 In terms of pupil enrollments, these three school districts represent the 29th (Granite) 44th (Jordan), and 59th (Davis) largest districts in the nation (Digest of Education Statistics 1992).
- 38 1992 Utah School Directory published by the Utah State Office of Education.
- 39 Utah Code 53A-2-106
- 40 Ibid.
- 41 Utah Code 53A-3-105
- 42 Utah Code 53A-3-101 (1)
- 43 Utah Code 53A-3-402
- 44 Utah Code 53A-3-301
- 45 Utah Code 53A-3-302 (1)
- 46 Utah Code 53A-3-301 (1)
- 47 Data in this section including Table 1 and 2 are based on figures in the 1992 Utah School Directory published by the Utah State Office of Education.

enrollment: within the state varies considerably depending upon the type of school and its location. The same is true for the range of enrollments (see Table 1.2).

Table 1.1
Average School Enrollments in Utah
Public Schools 1991-1992

	Elementary	Junior/Middle	High Schools	Special
*Wasatch Front	655	1102	1704	101
Non Wasatch Front	349	608	514	32
State-wide	548	912	1,012	82

*Wasatch Front = Weber, Ogden, Davis, Salt Lake City, Granite, Murray, Jordan, Alpine, Provo, Nebo School Districts⁴⁸

Table 1.2
Range of School Enrollments in
Utah Public Schools, 1991-1992

	Elementary	Junior/Middle	High Schools	Special
*Wasatch Front	58-1215	344-1900	478-2687	1-572
Non Wasatch Front	6-938	92-1436	9-1760	2-142
State-wide	6-1215	92-1900	9-2687	1-572

*Wasatch Front = Weber, Ogden, Davis, Salt Lake City, Granite, Murray, Jordan, Alpine, Provo, Nebo School Districts.
Utah School Directory, Utah State Office of Education, 1992

The majority of Utah schools follow a traditional late August through May calendar. However, largely in response to growing enrollments and space considerations, 10 school districts (Alpine, Cache, Davis, Granite, Jordan, Logan, Provo, Salt Lake City, San Juan, and Washington) have established year round schools. These include 79 elementary schools, 5 secondary schools, and 1 special school. A total of 73,020 children or approximately 16% of the state's enrolled public school age children are attending year round schools. The most popular or common year round schedule is the 45-15⁴⁹ modified model which is utilized by 70 of the state's 85 year round schools. Average enrollment in Utah's year round schools is 856 with a range of 161 to 1,487.

OTHER PUBLIC SCHOOLS AND ORGANIZATIONAL STRUCTURES

Under constitutional authorization and encouragement to establish "such other schools and programs which the legislature may choose to designate"⁵⁰ the legislature has established schools for the deaf,⁵¹ schools for the blind,⁵² and programs of applied technology. The governance and control

48 The phrase "Wasatch Front" is used by a number of state agencies to categorize those areas of the state along the western front of the Wasatch Mountain Range. At this point, standard and discreet boundaries of this area have not been defined. In this chapter, "Wasatch Front" is used in reference to the following school districts: Weber, Ogden, Davis, Salt Lake City, Granite, Murray, Jordan, Alpine, Provo, and Nebo.

49 That is, 45 days in school and 15 days out of school or 9 weeks in school and 3 weeks out of school.

50 Constitution of Utah, Article X, section 2

51 Utah Code 53A-25-101

52 Utah Code 53A-25-201

Organization and Control

of the Schools for the Deaf and Blind are vested in a board of trustees which consists of the entire State Board of Education.⁵³ These schools are located in Ogden with an extension division in Salt Lake City. The State Board of Education has also been designated by the legislature to serve as the State Board for Applied Technology⁵⁴ and to establish minimum standards for applied technology programs.⁵⁵ There are currently five Applied Technology Centers. They are located in Logan, Kaysville, Ogden, Richfield, and Roosevelt

Another organizational unit operating within the public school structure of the state is the Regional Service Center. Authorized and established by the State Board of Education under its constitutional power of "general control and supervision,"⁵⁶ there are currently four such centers functioning. The mission of these centers is to serve school districts in cooperative projects such as purchasing, media services, inservice, and special education.⁵⁷

PROFESSIONAL EDUCATION ORGANIZATIONS

There are a number of organized professional educational associations and groups operating within the state. The only statutorily created unit is the Utah School Boards Association.⁵⁸ This organization includes in its membership the State Board of Education and the members of the 40 local boards of education. It is a cooperative organization that works together on activities and problems relating to the state's educational system. Boards are authorized by law to expend state and district funds to support the activities of the association.

Closely linked with the School Boards Association is the Utah School Superintendents Association, which includes the state superintendent, superintendents of the 40 local school districts, the superintendents of the Applied Technology Centers, as well as the superintendents of the State School for the Blind and Deaf. The majority of the funding for this association comes from the Utah School Boards Association.

Another organization receiving direct state and district financial support is the Utah High School Activities Association. The association is a cooperative and is organized under the authority of the 40 local public school districts and the trustees of the participating private schools. The purpose of the organization is to coordinate the various extra-curricular activities of public and participating private schools across the state, e.g., athletics, drama, forensics, music, etc.

Major privately organized professional educational organizations and associations actively serving Utah education and Utah educators include: the Utah Education Association, which boasts a

53 Utah Code 53A-25-104, 53A-25-203

54 Utah Code 53A-15-201

55 Utah Code 53A-15-202

56 Utah Administrative Code R300-456.2

57 Utah Administrative Code R300-456.1B

58 Utah Code 53A-5-101

membership that includes over 80% of the state's classroom teachers; the Utah affiliate of the American Federation of Teachers; the Utah Parent Teacher Association; the Utah Association for Adult, Community, and Continuing Education; the Utah Association of Elementary School Principals; the Utah Association of School Business Officials; the Utah Association of Secondary School Principals; the Utah Association for Supervision and Curriculum Development; the Utah Middle Level Association; the Utah School Employees Association; Utah Home Schools Association; the Utah School Counselors and Vocational Guidance Association; the Utah Vocational Association; and the Utah Vocational Directors Association.

TRENDS AND DEVELOPMENTS IN THE ORGANIZATION AND CONTROL OF PUBLIC EDUCATION IN UTAH

UTAH STATE PUBLIC EDUCATION STRATEGIC PLAN

In January of 1990 a concurrent resolution by the Utah legislature created a task force charged with developing a 5-year strategic plan for education. The subsequent work of this task force resulted in the creation of the "Utah State Public Education Strategic Plan, 1992-1997." This broad ranging plan, adopted and approved by the 1992 Legislature, represents a major effort to improve the system of public education in Utah and would appear to be the blueprint for the construction of future legislation in education. What follows is a description of the Task Force on Strategic Planning for Public and Higher Education and its work as expressed in the strategic plan.

Task Force on Strategic Planning

As created by law, the Task Force on Strategic Planning for Public and Higher Education is a 25 member committee charged with the responsibility of: 1) developing a strategic plan for public education in Utah; 2) monitoring and evaluating the progress of public education in the realization of this plan until December of 1997; and 3) issuing an annual report to the state regarding its own evaluation of strategic planning in public education.⁵⁹ To insure the fair representation of educational interests on the committee, i.e., business, industry, government, education, parents, and students, specific guidelines regarding committee composition were enumerated by the Utah Legislature.

59 Utah Code 53A-1a-202

The Strategic Planning Process

With the aid of a professional consultant, the task force began its formal efforts to create a strategic plan in August of 1990. Listed below in sequential order is a summary of the steps used to develop the strategic plan and the work produced by the task force.⁶⁰

STEPS USED TO DEVELOP THE STRATEGIC PLAN	
1.	Belief Articulation - The articulation of 19 belief statements that express the fundamental values underlying the Strategic Plan.
2.	Mission Statement - The articulation of a mission statement for Utah's system of public education.
3.	Analysis of Utah's Public Education System - An in-depth internal (i.e. educational governance system) and external (i.e. state economic, social, and demographic trends) analysis of Utah's system of public education.
4.	Identification of Critical Threats and Opportunities - The identification of those threats and opportunities facing Utah's system of public education.
5.	Articulation of Educational Objectives - The articulation of four objectives for Utah's system of public education.
6.	Articulation of Strategies - The articulation of 11 strategies for achieving the educational objectives noted above.
7.	Action Plan Development - Following the articulation of the strategies noted above, a 20 member team was assigned for each of the 11 strategies. Committees were charged with developing detailed plans for translating each strategy into action.
8.	Review and Final Agreement of Proposed Action Plans - The task force met in November of 1991 to reach final agreement on the action plans proposed by the 11 action plan committees, to make recommendations concerning the responsibility for each plan, and to assign a proposed phase-in period for each.

Purpose and Essence of the Strategic Plan

Building upon the foundation of previous state efforts, the stated purposes of the report issued by the Task Force for Strategic Planning in January of 1992 reflect visionary and guidance functions.⁶¹ These functions are discernible in the following quotes from the report: ". . . to create a bold new vision for the future of Utah Public Education;"⁶² ". . . [to] convey not only a vision, but a clear path for making that vision a reality;"⁶³ ". . . and "to be a resilient and flexible guide to leaders, policy

60 Committee Report. Utah State Public Education Strategic Plan, 1992-1997: A Strategic Guide for the Future Development of the Public School System. Salt Lake City, Utah: Office of the Legislative Fiscal Analyst, January 1992.

61 The visionary nature of the Strategic Plan is built to a great extent on the previous work of an earlier strategic planning committee commissioned in 1988 by the Utah State Board of Education. The report generated by this committee was entitled, A Shift in Focus, November 1988.

62 Committee Report, pp. 7f.

63 Committee Report, cover letter.

makers and administrators for aligning Public Education's structure and systems with those fundamental principles of effective leadership and management."⁶⁴

To capture the essence of its content, it is necessary to examine three critical components of the Strategic Plan, each of which builds on the other: the mission statement, strategic plan objectives, and strategies for the realization of objectives.⁶⁵ The first component of the plan, as articulated by the task force, is the Mission Statement for Utah's system of public education.

MISSION STATEMENT
Public Education's mission is to assure Utah the best educated citizenry in the world and each individual the training to succeed in a global society, by providing students with learning and occupational skills, character development, literacy, and basic knowledge through a responsive, state-wide system that guarantees local school communities autonomy, flexibility and client choice, while holding them accountable for results.

This collective perception of the fundamental purpose and function of public education serves as the basis for the two critical components that follow. As is readily evident, several identifiable themes emerge from the Statement: world class educational quality, outcome-based learning, marketable work skills, character education, local school autonomy, choice, and accountability.

The second component which further defines the essence of the strategic plan is the objectives for public education identified by the Task Force. As noted in the report, these objectives represent the measurable and demonstrable end-results that are indicative of the accomplishment of the stated Mission.⁶⁶ Examination of these objectives reveals the high expectations held by the Task Force for Utah's system of public education: the student's achievement of his/her own educational objectives; successful employment following graduation; worldwide educational quality, and high working incomes.

STRATEGIC PLAN OBJECTIVES
<ol style="list-style-type: none">1. One hundred percent of Utah's students will achieve the objectives of their individually developed Educational/Occupational Plans.2. Each student departing the public schools will achieve success in productive employment and/or further education.3. Utah education will be the standard world wide.4. Utah will achieve the highest per household income in America.

64 Committee Report, p.7.

65 Committee Report, pp. 13-15.

66 Committee Report, p. 14.

Those broadly-stated strategies for deploying resources toward the realization of stated objectives constitute the third critical component of the strategic plan. Eleven strategies were articulated by the Task Force.

- | STRATEGIES FOR REALIZATION OF OBJECTIVES | |
|---|---|
| I. | We will redesign the educational system, its organization, laws and funding formulas, including removing state and local barriers, to achieve our mission and objectives. |
| II. | We will develop a world-class curriculum that enables students to successfully compete in a global society. |
| III. | We will energize our system of public education by attracting and retaining educators from among our best and brightest citizens through an aggressive plan to elevate its stature as a profession and compensate in a competitive way. |
| IV. | We will empower each school to create its own vision and plan to achieve results consistent with the mission and objectives of Utah public education. |
| V. | We will create the environment and provide the training necessary for school communities to achieve their mission. |
| VI. | We will employ technology to restructure and improve the teaching/learning process and its delivery. |
| VII. | We will install an assessment information retrieval system that will provide students, parents and educators with reliable, useful and timely data on the progress of each student. |
| VIII. | We will educate all stake-holders on the mission and objectives of public education in Utah. |
| IX. | We will personalize education for each student. |
| X. | We will support research and development throughout the system with emphasis on initiatives at the local school level. |
| XI. | We will expand and strengthen school/business partnerships that support our mission. |

Close examination of these 11 strategies reveals the plan's focus on various aspects of the state's education system, e.g., finance structure, curriculum, personnel, technology, testing, research and development, public relations, etc. Of primary importance, however, is the willingness and commitment reflected in the plan to: 1) redesign, as is necessary, the organizational and governing system of public education to meet the Mission Statement and Objectives of the Strategic Plan (Strategy I); 2) align the organization of the educational system of Utah with outcome-based and accountability measures (Strategies I, IV, VII); and 3) the decentralization of authority to individual school sites for the purposes of meeting the objectives of the state (Strategies I, IV). Represented in these emphases are two seemingly counter-veiling trends: a centralization of accountability means and measures to the state level and a decentralization of authority regarding the delivery of education to

the local level. Consistent with the character of the Strategic Plan, such trends could contribute to the emergence of a centrally directed, yet locally autonomous educational governance structure in Utah,

Current State of the Strategic Plan

As noted above, the five year Strategic Plan for public education as developed by the Task Force on Strategic Planning was approved by the 1992 Utah Legislature. This approval may be interpreted as a commitment by the state government to move ahead with the Plan. While certain components are currently in place, e.g., Educational Technology Initiative, Career Ladder structure, State-wide Testing Initiative, School Choice Alternative, etc., it is reasonable to assume that the Plan will serve as a blueprint to guide the construction and implementation of future education legislation. As of January 1993 specific details regarding the full implementation and costs of the Strategic Plan remain illusive. While the Strategic Plan is an integral part of his educational reform package, the newly elected governor has promised not to raise taxes to finance its effectuation.

Organizational and Structural Implications of the Strategic Plan

While the full extent of system reorganization has yet to be realized, two significant pieces of legislation--both consistent with the spirit of the Strategic Plan--were recently passed by the Utah Legislature. Each has implications for the organization and structure of education in the state. The first piece of legislation focuses on school choice. Effective January 1, 1993, Utah students will be allowed to seek enrollment in the public school of their choice.⁶⁷ Such choice, however, is not without its limitations. Local school boards must by law adopt specific standards for acceptance and rejection of applications.⁶⁸ Standards may include the capacity of program, class, grade level, or school building. In addition, a local school board may, by resolution, determine that nonresident students may not attend any of its schools.⁶⁹ As of yet, no additional funds have been appropriated by the state for the transportation costs incurred by this plan.

In addition to the passage of a school choice bill, \$800,000 was appropriated by the 1991 Legislature to assist public elementary and secondary schools in implementing site-based decision making pilot programs.⁷⁰ A total of 16 schools were designated to receive the funds over a three year period. Granted flexibility and exemption from certain state and local regulations, these pilot schools were encouraged to experiment with different strategies to meet the academic goals of their school. Taken together, such initiatives reflect the spirit of the Strategic Plan and are perhaps indicative of future legislation relating to the decentralization of the educational delivery system in Utah.

67 Utah Code 53A-2-207 to 213

68 Utah Code 53A-2-209

69 Utah Code 53A-2-207 (2)(a)

70 Utah Code 53A-15-502 (1)

SELECTION PROCEDURES FOR THE STATE BOARD OF EDUCATION

Beginning in 1992 the method of nominating individual members to the State Board of Education changed significantly.⁷¹ By May 1 of each election year, the governor selects a seven member nominating committee for each district where an election is scheduled to be held.⁷² Members of the nominating committee must reside in the state board district. One member must be serving on a local school board within the state board district, another must be employed as a school district or public school administrator, a third must be employed as a public school teacher, a fourth must be someone who belongs to a parent association that provides direct and ongoing support to public schools within the district, and the three remaining appointees are to be individuals that represent various economic interests and the public at large.⁷³

By August 1 of an election year, the nominating committee must submit a list to the governor of no fewer than three candidates and no more than five.⁷⁴ The committee has the responsibility to prepare a list of potential candidates from which the nominees given to the governor will be selected. However, individuals wishing to be considered may submit their own names to the committee prior to June 15 of the election year.⁷⁵ By September 1, the governor must then narrow each list to two candidates.⁷⁶ If the governor fails to do so, the nominating committee assumes the responsibility.⁷⁷ Nominating committees serve for a 1 year term.⁷⁸

This rather complicated nominating process was the result of several years of policy debate regarding how to assure a stronger and more competent State Board of Education. Some have argued that the State Board of Regents, which governs higher education in the state and which is appointed by the governor with Senate approval, constitutes a more high powered and competent body than the State Board of Education, which has in recent times been an open elected office. The new system is a compromise between those who favored appointment to office and those who felt it should remain an open nonpartisan position nominated and elected by the citizenry. The increase in the number of board members from 9 to 15 makes the body equal in membership to the State Board of Regents. It is also anticipated that the increased membership will result in the body operating more through standing committees like the Board of Regents and thereby result in less open bickering in Board meetings than has been the case in recent years. The November 1992 election has put the system into place. The results will become evident with the passage of time. The nomination system is unique among the 50 state systems.

71 Utah Code 53A-1-101 (6) (a) and (b)
72 Utah Code 53A-1-103 (1)
73 Utah Code 53A-1-103 (2)
74 Utah Code 53A-1-103 (5)
75 Utah Code 53A-1-103 (6)
76 Utah Code 53A-1-103 (9)
77 Utah Code 53A-1-103 (10)
78 Utah Code 53A-1-103 (3)

COORDINATED SERVICES

Many organizations have joined nationally in a major movement to improve the delivery of educational and other social services through collaborative efforts.⁷⁹ Although the Utah involvement is currently not as far along or as aggressive as it is in some states, the Utah legislature in 1989 enacted the "Coordinated Services for At Risk Children and Youth Act." By this act, it is the declared policy of the state of Utah to unite the Department of Human Services, the State Office of Education, and the Department of Health to develop and implement comprehensive school-based systems of service for each at risk student in grades kindergarten through three and the student's family in order to help prevent academic failure and social misbehavior.⁸⁰

The act establishes a State Council for At Risk Children and Youth, authorizes local committees initiated through elementary school principals, and authorizes pilot prevention and early intervention programs. A 1992 amendment⁸¹ to the law requires the state council to make rules to ensure cooperative development of a single coordinated plan for at risk students and their families for services required under the pilot programs authorized by the act. It further clarifies the role and use of records by the case management team.

There are currently (November 1992) 34 Schools in 8 separate school districts participating in the program. However, legislation is pending that would: 1) increase the number of schools to approximately 200; 2) extend the grade level from K-3 to K-6; 3) authorize the piloting of two middle/junior high programs and two hospital based programs; 4) bring the Juvenile Court system into the program as the 4th cooperating agency; and 5) establish a steering committee composed of the department heads of the participating agencies and representatives from various advocacy groups.⁸²

79 Perhaps the most noted organization in this respect is the Education and Human Services Consortium, which consists of the American Public Welfare Association, Center for Law and Social Policy, Center for the Study of Social Policy, Child Welfare League of America, Children's Defense Fund, Council of Chief State School Officers, Council of Great City Schools, Education Commission of the States, Family Resource Coalition, Institute for Educational Leadership, Joining Forces, National Alliance of Business, National Assembly of National Voluntary Health and Social Welfare Organizations, National Association of Counties, National Association of Secondary School Principals, National Association of State Boards of Education, National Conference of State Legislatures, National Governors' Association, National League of Cities, National School Boards Association, National Youth Employment Coalition, U.S. Conference of Mayors, Wider Opportunities for Women, and the William T. Grant Foundation Commission on Work, Family and Citizenship. This coalition has published several publications including: *New Partnerships: Education's Stake in the Family Support Act of 1988*, *What It Takes: Structuring Interagency Partnerships to Connect Children and Families with Comprehensive Services*, and *Thinking Collaboratively: Ten Questions and Answers to Help Policy Makers Improve Children's Services*.

80 Utah Code, 63-75-2

81 See Utah Code, 63-75-4 (5)

82 Based on a November 10, 1992 telephone conversation with Mary Ann Williams, Director of the At Risk Program, Office of the State Board of Education.

STATE LANDS TRUST MANAGEMENT

Another significant change in the structure of the public education system in Utah focuses on the management of the state's school and institutional Trust Lands.⁸³ With the Utah Statehood Enabling Act of 1896, approximately 10% of all acres (5.8 million) within the state were entrusted by the federal government to state care. Consistent with the original intent of the Act, monies generated from the sale and lease of this land were to be committed to a trust fund earmarked specifically for the support of the public education system of Utah. Since its creation, however, questions from the public regarding the management of this Trust have arisen. Such concerns focus on those motivating principles guiding State Lands Trust decisions, e.g., have the interests of public education historically been the primary motivating factors of such decisions? According to a recent legislative audit, sales of Trust lands in noncompetitive deals with local governments and private developers have cost public schools more than \$1 million in revenues.⁸⁴

In an effort to ensure the prudent management of monies generated from this Trust and to prevent the diversion of assets to other beneficiaries not designated by the Act, the 1992 Utah Legislature enacted laws to protect the interests of public education in the management of Trust Lands. The legislation which emerged had as its focus: 1) the restructuring of the process by which members are nominated to the Board of State Lands and Forestry; and 2) the rearticulation of the guiding principles for trust management.

As the agent responsible for the management of the state Trust Lands, the Board of State Lands and Forestry consists of 11 members. Whereas the state superintendent of public instruction (or the superintendent's designee) is an automatic member of this Board, the remaining 10 members serve at the pleasure of the governor.⁸⁵ The manner in which these 10 members are nominated to the governor was the focus of change for the 1992 Legislature. According to the new law, a 9-member nominating committee is charged with submitting a list of candidates to the governor for each of the 10 positions. To ensure that the interests of education are represented in the nominating process, four of the nine members of the nominating committee are to be selected by the State Board of Education. In terms of the rearticulation of the guiding principle of management, the State Legislature specifically assigned the Board of State Lands and Forestry the responsibility of administering school and institutional Trust Lands in a "manner which makes the interests of the original beneficiaries (the public school system) paramount."⁸⁶

83 Utah Code 65A-1-1

84 See report 9209 by the Office of the Legislative Auditor Performance Audit: Division of State Lands and Forestry. November 12, 1992.

85 Utah Code 65A-1-3 (1)

86 Utah Code 65A-1-2 (4)(a)

As noted above, the legislative intent of these changes is to give public education a stronger voice in the selection of trust board members and to guarantee that beneficiary interests receive top priority in management decisions.

CLASS SIZE REDUCTION

For over a decade Utah has had one of the highest student/teacher ratios in the nation; Utah and California have regularly ranked either first or second for this measure.⁸⁷ (Student/teacher ratios are commonly defined by dividing Average Daily Attendance (ADA) for students by Full Time Equivalencies for Teachers.) In an effort to address this condition, the Utah legislature is appropriating funds expressly earmarked for a systematic class size reduction. For a description of class size and pupil teacher ratios see the chapter in this publication entitled "Education Personnel Issues and Initiatives in Utah."

CONCLUSION

As noted above, the purpose of this chapter is to provide the reader with a general description of the organization and control of public education in Utah and to identify significant trends and developments that will have an impact on this structure in the immediate future. To this end, several characteristics of Utah's public education system have been noted:

- 1) The Utah Constitution mandates that the State Legislature provide for the establishment of a state educational system.
- 2) The central state actors in the organization and control of education in Utah are the State Legislature, the Governor, the State Board of Education and the State Superintendent of Public Instruction.
- 3) On the basis of constitutional authority, the State Legislature is the central and legally most powerful educational policy-making body in Utah.
- 4) As creations of the State, local school districts function as agents of the State in the administration for delivery of public education.
- 5) There are 40 local school districts in Utah serving 454,164 students. These districts range in size from 184 to 79,366 students;
- 6) During the 1991-92 academic year there were 769 public schools in Utah: 445 elementary schools, 114 junior high and middle schools, 98 high schools, and 112 special schools.
- 7) The majority of Utah schools follow the traditional academic calendar. However, in response to growing enrollments, 10 districts have established year round schools.
- 8) Constitutional provisions exists for the creation of several "special" schools. Administered under the direct authority of the Utah State Board of Education, these include the Schools for the Deaf and Blind and the Applied Technology Centers.

⁸⁷ See National Education Association publications on Ranking of States

Organization and Control

- 9) While a number of organized professional education associations exist within the State, the only statutorily created unit is the Utah School Boards Association.

Likewise, several trends of immediate significance to Utah's system of public education were also noted:

- 1) The "Utah State Public Education Strategic Plan, 1992-1997" represents a major effort to improve public education in Utah and would appear to be the blueprint for future changes in Utah's system of public education.
- 2) In an effort to improve its representativeness and effectiveness, the size and method of nominating individuals to the State Board of Education has changed significantly.
- 3) The passage of the "Coordinated Services for At Risk Children and Youth Act" by the 1989 Utah Legislature represents an attempt to improve the delivery of educational and other social services through the collaborative and coordinated efforts of multiple social agencies.
- 4) In an effort to ensure the prudent management of monies, the 1992 Utah Legislature enacted laws to protect the interests of public education in the management of school trust funds.
- 5) Utah has one of the highest student/teacher ratios in the nation. In an effort to reduce this ratio, the State has recently appropriated funds to systematically reduce class size.

Taken together, these noted features, characteristics, and trends provide the reader with a general description of the organization and control of public education in Utah.

CHAPTER TWO: SCHOOL DEMOGRAPHICS

By Patrick F. Galvin

Demographics (population growth, ethnic diversity, and the distribution of the population by age and geographic location) are factors that directly affect educational policy and school finance. In this chapter the demographic characteristics of Utah are described and discussed relative to national averages and rural-urban comparisons.

POPULATION GROWTH

Utah's resident population, according to the 1990 Census, was 1,722,850. In the last decade Utah's resident population has grown by 261,813, or 17.9%. This growth rate is above the national average of 9.8% but below the average for the Mountain States, which was 20.1%. Nevada's population grew by 50.4% during the last decade, which was the fastest rate of growth in the country.

Current estimates of future population growth suggest that by the year 2001 Utah's population will exceed 2,000,000 people.⁸⁸ These estimates are subject to considerable speculation about future birth rates and migration trends. Utah's birth rate, currently 20.7/1000 population, has declined steadily in recent years but still is above the national average of 16.2/1000 population. Migration trends are difficult to predict; but if Utah's

HIGHLIGHTS

- * Utah's population has grown by 17.9% during the last decade which is well above the national average of 9.8% but below the average for the Mountain States, which was 20.2%.
- * Fall enrollments of Utah's Student dropped from over 3% annual growth during the mid 1980s to less than 2% annual growth in the late 1980s and early 90s. However, enrollment growth may increase in the coming years.
- * Utah's population is 92.7% Caucasian, Native American 1.4%, Hispanic 3.75%, Asian 1.5%, Pacific Islander 0.27%, and African American 0.3%.
- * 37.2% of Utah's population is under the age of 18, which is the largest percentage in the country.
- * Comparisons between rural and urban district enrollments reveal similar distributions across grade levels, although the urban districts account for more than 70% of the enrollments.
- * The distribution of students by grade level reveals that the lower grade levels have 1 to 2% higher enrollments than do the higher grade levels, suggesting that Utah's school enrollments are not likely to decrease soon.
- * A projected enrollment growth, for 1993-94, of 8900 students would cost the state an additional \$13,261,000 (at a WPU value of \$1490). These figures do not include the cost of providing additional buildings.

88 State of Utah Economic and Demographic Projection, 1992

economy maintains its current strength compared to other states coping with economic recession, then these estimates of Utah's population growth may be too conservative.

Of Utah's 1,722,850 residents, 447,891 are students (K-12), which is about 26.7% of the population; this compares to a national average of 18.3%. Utah ranks first in the country with the percentage of its population ages 5 - 18.⁸⁹

In the last few years, Utah's enrollment growth has slowed (the figures reported here are taken directly from the Supplement to the Annual Report of the Utah State Superintendent of Public Instruction, 1990-91). Between 1984 and 1985, for example, enrollments grew at 3.37%. During the later part of the 1980s, however, the growth rate dropped by more than half to a rate below the national average (the national average was about 1.6%). More recently enrollment growth has increased to 2.06% and is expected to continue to rise.

Table 2.1
Public School Enrollment Growth, 1985 to 1990

Sch Year	1985-6	1986-7	1987-8	1988-9	1989-90	1990-1
Enrollment	403,305	415,994	423,386	429,551	435,762	444,732
% Growth	3.37%	3.15%	1.78%	1.46%	1.45%	2.06%

Supplement to the Superintendent's Annual Report, Summary of Statistical and Financial Data, 1990-91

The Governor's Budget Summary 1993 predicts an annual enrollment growth for public schools of 2.3% for the next school year or about an additional 8900 students.⁹⁰ Given the current immigration to the state, this estimate may be conservative. Nonetheless, such an enrollment growth will require the state to raise an additional \$13,261,000 at the 1992-93 value of the WPU (\$1,490). Such a figure does not include costs for facilities or related services. In other words, while the current rate of growth is only slightly above the average among states, the fiscal contingencies associated with increased enrollment growth are serious unless tax revenues grow with the economy and job expansion.

DISTRIBUTION OF POPULATION

Like many states, the majority of Utah's population lives in urban settings. Nationally about 65% of the population resides in urban settings; in Utah more than 77% live in urban settings. This concentration of residents along the Wasatch Mountain Range accounts for the fact that three of Utah's school districts are among the largest (top 60) in the country.

It is not altogether clear what constitutes ruralness, particularly with regard to student populations. However, for the sake of comparisons in this chapter, student populations were divided

⁸⁹ National Education Association, 1991

⁹⁰ This figure is slightly more than that estimated by the Utah State Office of Education, School Finance and Statistics section (this department estimated an enrollment increase of 6,425)

School Demographics

into two groups: the Wasatch Front Group and the Rural Group. The Wasatch Front Group includes ten school districts in the four largest counties along the western side of the Wasatch mountain range: Alpine, Davis, Granite, Jordan, Murray, Salt Lake, Nebo, Ogden, Provo, and Weber. The remaining 30 school districts were included in the Rural Group.

Table 2.2, below, compares selected student characteristics in these two groups of districts. The total enrollment reported here is the Fall 1991 count.⁹¹ Of this 71.8% were enrolled in the Wasatch Front districts, and 28.2% were enrolled in the Rural districts. The average enrollment size per district in Utah was 11,076: in the Wasatch Front districts the average was 35,346 while the Rural Group average was 4,031.

Table 2.2
Distribution of Student Populations
Between Wasatch and Rural Districts as
A Percentage of the Total Enrollment, 1990-91

	Total Enrollment	% of Total Enroll	Avg Dist Enroll	Enroll Growth 1988 to 1990
State	443,079	N/A	11,077.0	3.76%
Wasatch	334,523	75.5%	33,452.3	3.73%
Rural	108,556	24.5%	3,618.5	3.78%

Supplement to the Superintendent's Annual Report, Summary of Statistical and Financial Data, 1990-91

The final statistic in Table 2.2 compares the enrollment growth of these two groups of districts between the years 1988 and 1990. Enrollments for the Wasatch and Rural districts grew at almost the identical rate. This was a surprising finding since one generally assumes that the urban areas are growing more rapidly than the rural areas.

POPULATION BY AGE GROUP

Utah has the youngest population in the country: 37.2% of Utah's population is younger than 18 years old. Alaska is the next closest state to Utah in this respect with 31.9% of its population under the age of 18. Nationally, 26.0% of the population is younger than 18 years old.⁹²

Table 2.3 displays the distribution of students among grade levels. The table provides four kinds of information. First, it provides the actual enrollments by grade level across all 13 grade levels (K-12). Second, enrollments for Wasatch Front and Rural districts were reported separately. Third, the table displays Wasatch Front and Rural district enrollments as a percentage for each grade level (% of Grade). In each of the grade levels, the Wasatch Front districts account for about 75% of the students with a slightly higher average for seventh, eighth, ninth, and tenth grades. The rural districts account for about 24% in all the grade levels except for seventh, eighth, ninth, and tenth grades.

91 More recent data were not immediately available at the time of writing this chapter. The intention of the table is more to give a sense of relative percentages than to provide the most updated data, although future publications will attempt to include only the most updated demographic data.

92 The source of these figures is the report: *Kids Count Data Book: State Profiles of Child Well-Being*. The Center for the Study of Social Policy, Washington DC.

Next, the table provides information about the enrollments for each grade level as a percentage of total enrollment within the Wasatch and Rural Districts respectively: this data is labeled "% Of Group." These data reveal that the distribution of students is heavier in the lower grades than in the higher grade levels with a peak at about fifth grade. This pattern is very similar between the Rural and Wasatch Groups and suggests that current enrollment trends will require continued expansion of high school facilities. In other words, there is no obvious relief from enrollment pressures in the near future.

Table 2.3
Distribution of Student Populations
Between Wasatch and Rural Districts by
Grade Level, 1990-91

	Kinder	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth	Eleventh	Twelfth
All	33,166	34,741	35,265	36,903	36,084	37,236	36,267	31,826	32,461	31,015	31,015	30,035	28,068
Wasatch	25,072	26,233	26,781	27,987	27,433	28,106	27,405	24,532	25,790	24,854	24,854	22,765	21,225
% of Grade	75.6%	75.5%	75.9%	75.8%	76.0%	75.5%	75.6%	77.1%	79.4%	80.1%	80.1%	75.8%	75.6%
% of Group	7.5%	7.9%	8.0%	8.4%	8.2%	8.4%	8.2%	7.4%	7.7%	7.5%	7.5%	6.8%	6.4%
Rural	8,094	8,508	8,484	8,916	8,651	9,130	8,862	7,294	6,671	6,161	6,161	7,270	6,843
% of Grade	24.4%	24.5%	24.1%	24.2%	24.0%	24.5%	24.4%	22.9%	20.6%	19.9%	19.9%	24.2%	24.4%
% of Group	8.0%	8.4%	8.4%	8.8%	8.6%	9.0%	8.8%	7.2%	6.6%	6.1%	6.1%	7.2%	6.8%

Supplement to the Superintendent's Annual Report, Summary of Statistical and Financial Data, 1990-91

POPULATION BY ETHNIC COMPOSITION

The majority of Utah's population is white Caucasian; only 7.4% of the population is nonwhite. Compared to many other states, Utah has relatively few minority residents; but it is interesting to note that 17 other states have a smaller percentage of minorities than does Utah.

The breakdown of ethnicity within the state is displayed in Table 2.4 as percentages of the total population. Most of the nonwhite students, 76.7%, reside within the Wasatch Front districts. The exception is for the Native American students; but even for this group, only 61.2% is enrolled in the Rural Group of schools.

Table 2.4
Distribution of Ethnic Student Populations
Between Wasatch and Rural Districts as
A Percentage of the Total Enrollment, 1990-91

	Native American	Hispanic	Asian	Pacific Islander	African American	White
Whole State	6,125 1.38%	16,659 3.75%	6,682 1.50%	1,222 0.27%	2,372 0.53%	411,672 92.57%
Wasatch	2,387 0.54%	13,685 3.08%	6,003 1.35%	1,088 0.24%	2,205 0.50%	310,727 69.87%
Rural	3,738 0.84%	2,974 0.67%	679 0.15%	134 0.03%	167 0.04%	100,945 22.70%

Supplement to the Superintendent's Annual Report, Summary of Statistical and Financial Data, 1990-91

**DEMOGRAPHIC CHARACTERISTICS OF UTAH'S SCHOOLS: ENROLLMENTS,
FTE TEACHER COUNT, AND PUPIL TEACHER RATIOS**

Each year the Utah State Office of Education provides a directory of Utah's schools. Four types of schools are identified in this directory: elementary, junior/middle high, senior high, and special schools. Using this classification scheme, the break down of Utah's 769 schools is displayed in Table 2.5.⁹³

Table 2.5
Count of Schools in Utah
by Classification Type, 1992-93

Region School Type	State		Rural		Wasatch	
	Freq	%	Freq	%	Freq	%
Elementary	445	57.9	156	54.0	289	60.2
Junior/Middle Schl	114	14.8	43	14.9	71	14.8
Senior High	98	12.7	57	19.7	41	8.5
Special Schools ⁹⁴	112	14.6	33	11.4	79	16.5
TOTAL	769	100.0	289	100.0	480	100.0

Utah School Directory, Utah State Office of Education, 1992

Elementary schools account for 57.9% of the total number of schools in Utah. Junior high and senior high schools account for 14.8% and 12.7% respectively. Special schools account for 14.6% of the total number of schools.

As descriptive reference points, the Wasatch Front school districts, although they number only ten, have many more schools than the rural districts. A greater percentage of the schools in the Wasatch Front districts are elementary than is the case for the Rural school districts. The Wasatch Front districts have twice as many special schools as do the 30 rural school districts.

Table 2.6
Enrollment of Schools in Utah
by Classification Type, 1992-93

Region School Type	State		Rural		Wasatch	
	Mean	# of Schls	Mean	# of Schls	Mean	# of Schls
Elementary	548	445	348	156	655	289
Junior/Middle Schl	915	114	608	43	1102	71
Senior High	1,012	98	513	57	1704	41
Special Schools	84	84	35	24	101	60
TOTAL	613	741	395	280	745	461

Utah School Directory, Utah State Office of Education, 1992

Table 2.6 provides a breakdown of average school enrollments by type of school and region. On the average, the enrollment for a typical elementary school is 548 students (this includes a variety of

⁹³ In some cases schools are identified with two school numbers. These cases usually show two student and teacher populations. Familiarity with these schools may lead some to identify such cases as a single organization; where the state has identified such a school with two numbers it is counted twice in this account.

⁹⁴ Special Schools include a wide variety of schools including: adult, vocational, pre-schools and special education schools.

organizational arrangements including any school identified by the state as elementary). The average size of the elementary schools for the rural districts was considerably smaller than for the Wasatch Front Districts: 358 to 669 respectively. These general differences in enrollment characteristics between the rural and urban school district were consistent among all types of schools: the urban districts operated with much larger school enrollments.

In Table 2.7 the average count of full time equivalent (FTE) teachers is compared among these types of schools. In general, the average number of FTE teachers increases noticeably as one moves from the elementary to the high school. This pattern is particularly evident in the Wasatch Front schools, which is not surprising considering their large enrollments.

Table 2.7
Count of Full Time Equivalency Teacher Counts
in Utah's Schools by Classification Type, 1992-93

Region School Type	State		Rural		Wasatch	
	Mean	# of Schls	Mean	# of Schls	Mean	# of Schls
Elementary	21.7	440	15.2	152	25.1	288
Junior/Middle Schl	36.9	114	26.1	43	43.4	71
Senior High	45.2	97	24.8	56	73.0	41
Special Schools	8.8	61	4.8	15	10.1	46
TOTAL	26.3	712	18.5	266	30.0	446

Utah School Directory, Utah State Office of Education, 1992

Table 2.8, below, displays the average pupil-teacher ratios for schools by organizational type. Comparisons of these values between the Wasatch Front and Rural school districts reveal some noteworthy differences. At the elementary level, the differences between the two groups of districts is nonexistent with a statewide average ratio of 26.3 students per FTE teacher. As one moves up to the high school level, the pupil teacher ratio decreases; but this is more true for schools in the Rural district than for schools in the Wasatch Front districts. This difference is particularly evident in the Special schools where the pupil-teacher ratio is 11.6 students per FTE teacher for special schools within Rural districts; the pupil-teacher ratio is 22.8 within Special schools for the Wasatch Front school districts.

Table 2.8
Pupil Teacher Ratios for Schools in Utah
by Classification Type, 1992-93

Region School Type	State		Rural		Wasatch	
	Mean	# of Schls	Mean	# of Schls	Mean	# of Schls
Elementary	26.3	440	26.4	152	26.2	288
Junior/Middle Schl	24.2	114	22.6	43	25.1	71
Senior High	21.1	97	19.3	56	23.3	41
Special Schools	20.2	54	11.6	13	22.8	41
TOTAL	24.8	770	23.6	264	25.5	441

Utah School Directory, Utah State Office of Education, 1992

SUMMARY COMMENTS AND CONCLUSIONS

Five general findings can be reported in this section. First, while population growth in Utah is above the national average, it is below the average for the mountain states and certainly is not growing as fast as states like Nevada and California. Second, Utah has the largest percentage of children under 18 of any state in the country. Third, comparisons between rural and urban school districts, in terms of growth and distribution of students, suggest that the relative proportion of students by grade level for the two groups of schools is similar. Fourth, only about 7.4% of the state's student population is identified as an ethnic minority; the majority of those students are enrolled in Wasatch Front school districts. Finally, the distribution of students by grade level indicates that the lower grades have 1 to 2% higher enrollments than do the higher grades. These figures suggest that there is no immediate relief from enrollment expansion for Utah's schools.

If current enrollment growth, estimated at 2.3% by the Governor's office, is accurate, the budget for public K-12 education will have to expand by more than \$13,000,000 next year just to keep the value of the WPU at its current level. If the economy stays robust and the job expansion includes jobs that pay above the minimum level, then this enrollment growth should be readily managed. If, on the other hand, in-migration continues while the economy sputters, then the state will likely have serious fiscal problems supporting education.

CHAPTER THREE: FROM RIGOR TO UNDERSTANDING: A DECADE OF CURRICULUM REFORM IN UTAH

By: Trish Stoddart

Historically, the curriculum--the knowledge and skills that are taught in the public schools--has been the source of much scrutiny and public debate.⁹⁵ The Utah curriculum is no exception. During the past year there has been intense debate in Utah over whether sex education should be taught in the public schools. Nationally and locally, parents and concerned citizens have campaigned to have unsuitable books withdrawn from the curriculum.⁹⁶ Other groups have proposed that the study of evolution in the biology curriculum should be supplemented, or replaced by, the study of creationism.⁹⁷ The curriculum is at the center of the debate over public education because it not only defines what knowledge should be taught but what knowledge is the most valued.⁹⁸

Over the past ten years there have been significant changes in views of the curriculum both nationally and locally. In 1983 the authors of *A Nation at Risk*, a report issued by National Commission

HIGHLIGHTS

- * The Utah curriculum is consistent with, and has responded to, national reform movements and national education goals.
- * Utah's curriculum has changed significantly over the past decade: beginning with a focus on increased rigor and moving towards an emphasis on teaching for understanding.
- * In 1984, Utah increased credit requirements for graduation from high school. The new graduation requirements have had a substantial influence on student course-taking patterns. In 1992, the majority of Utah students were taking a more rigorous program of study than was true in 1984.
- * In 1987, Core Curriculum Standards were implemented which established the content and skills students were expected to master in language arts, mathematics, science, social studies, the arts, information technology, healthy lifestyles, and vocational education. The curriculum standards were written in the form of discrete behavioral objectives and aligned with a criterion-referenced student assessment program.
- * The curriculum is currently undergoing radical restructuring with a shift in focus from the memorization of discrete facts and skills towards teaching for understanding. The elementary mathematics and secondary language arts curriculum have been restructured. Science, social studies and other curriculum areas will be restructured in the future.
- * The new curriculum reforms will need to be accompanied by more a conceptually-based student assessment program and upgraded programs of teacher preparation and staff development.

95 Cohen, D. K. & Ball, D. L. (1990). *Policy And Practice: An Overview*. *Educational Evaluation And Policy Analysis*. 12(3) 233-240.

96 Apple, M. W. (1992). The text and cultural politics. *Educational Researcher*, 21(7), 4-11.

97 Scott, E. C. (1987). Antievolutionism, scientific creationism, and physical anthropology. *Yearbook Of Physical Anthropology*, 3(21), 21-39

98 Apple, M. W. (1992). The text and cultural politics. *Educational Researcher*, 21(7), 4-11.

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on Excellence in Education: United States Department of Education, criticized the dilution of the curriculum in American schools and argued for an increased focus on academic subjects and higher standards for graduation. In the same year, two reports on education in Utah, Education in Utah: A Call to Action⁹⁹ and Report of the Commission on Educational Excellence¹⁰⁰ called for the upgrading of the public school curriculum. In 1984, Utah raised graduation standards and began the development of a core curriculum. The Core Curriculum Standards, which were implemented in 1987, defined the knowledge to be taught in Utah public schools in terms of behavioral objectives and discrete skills.

In the past four years, however, there have been new calls for national curriculum reform.¹⁰¹ This cycle of reform focuses not only on content--what should be taught --but also on pedagogy-- how it should be taught. It embodies a shift in focus from the behavioral orientation of the 1970s and early 1980s to the new cognitive and social constructivist framework being propounded in the 1990s.¹⁰² This new national trend was foreshadowed in a report by the Utah Strategic Planning Commission called A Shift in Focus¹⁰³ which called for radical changes in the role of students in the public schools; to shift students from "passive participants in the educational process . . . receivers of material that has been reviewed, approved, packaged, and presented by others" (p.13) to students as active participants and full partners in the educational process. This new view of teaching and learning is beginning to influence the current revisions of the Utah Core Curriculum.

This chapter describes the Utah Core Curriculum and graduation requirements and discusses how these have influenced patterns of courses taken by students in the public schools. The final section describes the new curriculum reform movement and Utah's response to it and discusses the implications for student assessment practices and teacher education.

THE CORE CURRICULUM STANDARDS

The dominant trend in the last decade has been the increasing regulation and standardization of the curriculum taught in Utah public schools. The core curriculum specifies what should be taught at each grade level; districts are required to select textbooks and materials from an approved list, and students are evaluated on whether they have acquired the designated knowledge and skill through

99 Utah Educational Reform Steering Committee. Education in Utah: A Call to Action. 1983

100 Utah Commission on Educational Excellence. A Report of the Utah commission on Educational Excellence. 1983.

101 American Association for the Advancement of Science (AAAS). (1989). Science For All Americans. Washington, D.C.: AAAS; National Council of Teachers of English (NCTE). (1988). Report Card On Basal Readers. Urbana, Ill.: NCTE.; National Council of Teachers of Mathematics (NCTM). (1989). Curriculum And Evaluation Standards For School Mathematics. Reston, VA: NCTM.; National Research Council. (1989). Everybody Counts: A Report To The Nation On The Future Of Mathematics Education. Washington, D.C.: National Academy Press; National Science Teachers Association (NSTA). (1989). Essential Changes In Secondary Science: Scope, Sequence And Coordination. Washington, D.C.: NSTA.

102 Putnam, R. T., Lampert, M., & Peterson, P. L. (1990). Alternative perspectives on knowing mathematics in elementary schools. IN C. B. Cazden (Ed.). Review of Research in Education (Vol. 16, pp. 57-150). Washington, DC: American Education Research Association.

103 Utah Strategic Planning Commission. (1988). A Shift In Focus. Salt Lake City, UT: Utah State Office of Education.

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standardized tests aligned with the curriculum objectives. This standardization is designed to ensure that all children in Utah public schools have access to the same body of knowledge and are evaluated by the same standards.

The responsibility for making decisions about the curriculum--the knowledge and skills students learn in the Utah public schools--is vested with the Utah State Board of Education. The Utah State Board of Education is granted authority for the control and supervision of the public education system under Article X, Section 3, of the Utah State Constitution. The Board has the responsibility to make rules regarding student competency levels, graduation requirements, curriculum, and instructional requirements.

In January 1984, the Utah State Board of Education established a policy requiring the identification of a specific core of curriculum standards which must be completed by all students in grades K-12. The Core Curriculum was developed by the State Curriculum Advisors and teams of elementary and secondary school teachers and field tested in 1985-86. Feedback on the components was gathered from 11,600 teachers and administrators plus 250 others including curriculum directors, textbook and curriculum leaders, and university subject-specific experts. Thirty-six of Utah's 40 school districts were actively involved. The curriculum was revised on the basis of the evaluation data and submitted to the State Board of Education. Final Board approval was given in November 1986. The Core Curriculum Standards document was delivered to each of the 40 school district in January 1987. School superintendents were required to develop district plans for Core implementation and were given three to five years from delivery time of the Core document to have standards and documents in place.

The Utah Core Curriculum lays down the learning objectives for instruction for grades K-12 in Utah public schools. The goal of the core curriculum is to provide a "solid educational foundation for every student." The State Office of Education defines the Core Curriculum Standards and Objectives as the knowledge, concepts, skills, and personal traits essential to intellectual, social, physical, emotional, and ethical development. Utah students are expected to develop mastery of information, concepts, and skills in the subject areas of language arts, mathematics, science, social studies, the arts, information technology, healthy lifestyles, and vocational education. In 1990 library media skills (finding, using and analyzing information and ideas) were added for grades K-6 and infused into the subject areas for grades 7-12. Table 3.1 presents an overview of the Core Curriculum requirements.

The Core is based on the premise of "mastery learning," i.e., the expectation that the majority of Utah students can master the specified instructional objectives when given proper instruction and adequate time. The Core is designed to be the foundation of all special programs, i.e., Chapter I, Special Education, and Alternative Education. Students with disabilities are expected to master the Core unless exempted by an Individualized Educational Program (IEP).

Table 3.1
Description of the Core Curriculum
Utah State, 1992-93

ELEMENTARY CORE Grades K-6 Subject Area	MIDDLE LEVEL CORE Grades 7-8 (12 Units of Credit Required)		HIGH SCHOOL CORE Grades 8-12 (12 Units of Credit Required)	
	Subject Area	No. of Credits	Subject Area	No. of Credits
Language Arts	Language Arts	2.0	Language Arts	3.0
Mathematics	Mathematics	2.0	Mathematics	2.0
Science	Science	1.5	Science	2.0
The Arts	Social Studies	1.5	Information Technology (Computer Literacy)	0.5
Healthy Life Styles	The Arts	1.0	Social Studies	3.0
Information Technology (Computer Literacy)	Information Technology (Computer Literacy)	0.5	The Arts	1.5
	Healthy Life Styles	1.5	Healthy Life Styles	2.0
	Vocational Education	1.0	Vocational	1.0
	Electives	1.0	Electives	9.0

Utah State Board of Education. 1991

The core curriculum creates broad general standards written in the form of specific behavioral objectives for each grade level. It is the responsibility of the local school district and teacher to translate these into specific curriculum and instructional strategies. For example, in the Elementary Language Arts Curriculum, there are standards and objectives for listening, speaking, reading, literature, spelling, penmanship, written composition and drama for each grade level. Table 3.2 below includes the standards and objectives specified for reading at grade one:

Table 3.2
Core Curriculum Objectives for Grade One Reading
Utah State, 1992-93

Grade one reading standard 4010-0301 : The student will use phonics and sight recognition to decode words. They will begin to **develop comprehension skills.**

Objectives

- 4010-0301 Identify left-to-right, top-to-bottom, and front-to-back orientation as related to print.
- 4010-0302 Know consonant sounds, blends, and digraphs in all positions.
- 4010-0303 Know short and long vowel sounds as they appear in the reading scope and sequence.
- 4010-0304 Recognize appropriate phonogram (word families).
- 4010-0305 Use structural analysis to read contractions, compound words, singular and plural forms of words, and possessives on the students' level.
- 4010-0306 Read sight words and basal vocabulary as they appear in the reading program.
- 4010-0307 Comprehend word and sentence meaning in context.
- 4010-0308 Identify antonyms and synonyms on the students' instructional level.
- 4010-0309 Discriminate between a statement and a question.
- 4010-0310 Recognize alphabetical order by first letter.

Utah State Board of Education. 1991

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As Table 3.2 demonstrates, the curriculum is written in the form of discrete behavioral skills in which students are expected to achieve mastery. Attainment of these skills is measured by criterion-referenced tests.

The Utah Core Curriculum is not a static document. A review and revision schedule has been designed to examine each subject area on a systematic basis. The revised 7th to 12th grade Language Arts curriculum was published in 1992. The revised K-8 mathematics curriculum was approved by the State Board in October 1992 and will be implemented in 1993. The revision of the K-8 science curriculum will begin in 1993.

HIGH SCHOOL GRADUATION REQUIREMENTS

In 1984, the State Board of Education adopted a new policy for graduation from Utah public schools. Prior to 1984, Utah ATC (American College Testing) scores had been declining over a fifteen year period. According to the State Board of Education report *Education Utah's most critical industry*,¹⁰⁴ this was largely due to the fact that students had been taking a "smorgasbord" curriculum of desserts rather than main courses. Large numbers of students were enrolled in a "general" program of studies. Many students were electing to avoid courses in mathematics, the sciences, and language arts.

Table 3.3
A Comparison of Previous and New Graduation Requirements
for Utah Secondary Students

Curriculum Areas	Previous Requirements			New Requirements		
	Grades 7-9	Grades 10-12	Total 7-12	Grades 7-8	Grades 9-12	Total 7-12
Language Arts		3.0		2.0	3.0	
Mathematics		1.0		2.0	2.0	
Social Studies		2.0		1.5	3.0	
Science	*	1.0		1.5	2.0	
Healthy Life Styles		1.5		1.5	2.0	
The Arts		--		1.0	1.5	
Vocational Education		--		1.0	1.0	
Information Technology		--		0.5	0.5	
Electives		6.5		1.0	9.0	
Total	16-18	15.0	31-33	12.0	24.0	36

* 16-18 units of credit were determined by local districts

Source: Utah State Office of Education, 1992

As Table 3.3 illustrates, the 1984 high school graduation standards increased credit requirements in mathematics, language arts and social studies. Students in grades 7-12 are now required to successfully complete courses in language arts, mathematics, social studies, science, and healthy

104 Utah State Board of Education (1986). *Education: Utah's Most Critical Industry*. Salt Lake City, UT.: Utah State Board of Education

lifestyles in order to graduate. The requirements for language arts, mathematics, science and social studies were also significantly increased.

In Utah, during the eight-year period between 1984-1992, enrollment of secondary students in academic classes has increased significantly. Table 3.4 profiles the percentages of Utah high school seniors who have taken specific courses. This information is presented for the graduating classes of 1984, 1988, and 1992. In the period between 1984 and 1992, the enrollment of Utah high school students in mathematics has risen substantially. For example, enrollment in algebra II and geometry has increased approximately 20%.

Enrollment in science classes has also increased during the same period. Enrollment in chemistry grew from just under 27% in 1984 to over 41% in 1992. Physics enrollment increased just under 8% from 14.2% in 1984 to 22.1% in 1992. Biology is clearly the state's most popular science course with 86.4% of Utah seniors in the class of 1992 having completed work in biology. Enrollment in computer-related courses increased by 33%.

Table 3.4
Comparison of Percentages of Utah High School Seniors
Who Have Taken Specific Courses for 1984, 1988, and 1992

COURSES	1984	1988	1992
Algebra I	78.7%	88.4%	86.2%
Algebra II	48.2%	63.2%	67.7%
Advanced Algebra	NA	NA	38.4%
Geometry	48.3%	66.4%	69.1%
Trigonometry	24.7%	33.0%	37.3%
Biology	NA	NA	86.4%
Chemistry	26.7%	38.0%	41.2%
Physics	14.2%	18.8%	22.1%
Computer-Related Course	28.0%	43.4%	61.7%
AP History/Gov./Economics	15.6%	20.8%	28.9%
AP Mathematics/Calculus	10.1%	13.1%	13.7%
AP Foreign Language	NA	NA	6.2%
AP Music/Art	NA	NA	13.5%
AP Computer Science	NA	NA	3.3%

Source: Dr. David Nelson, Utah State Office of Education

Enrollment in Advanced Placement courses in which high school students can earn college credit has also demonstrated a profound increase in every area for which trend data are available. The most popular Advanced Placement area as of 1992 was history and social studies. Almost 30% of Utah seniors took courses in this area. Advance Placement English was also taken by a substantial percentage of the graduating class of 1992 with 26.8% of Utah's seniors taking this course.

Table 3.5 presents the 1992 percentages of Utah high school seniors taking at least two, three, and four years of course work in each of eight major subject areas. The majority of Utah secondary school students are now taking at least two years of English, history/social studies, mathematics and

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science. These figures indicate that the state graduation requirements are having an impact on student course taking patterns.

Table 3.5
Grade 9 Through 12 Programs of Studies of
Utah High School Seniors in the Class of 1992

Subject Area	Percentage of Utah High School Seniors Who Have Taken At Least		
	2 Years	3 Year	4 Years
English or Literature	98.4%	97.0%	87.6%
Foreign Language	55.4%	16.2%	5.6%
History/Social Studies	96.3%	80.6%	24.4%
Mathematics	97.7%	77.9%	39.6%
Science	93.4%	50.9%	18.6%
Art	42.8%	20.2%	10.2%
Music	29.4%	19.4%	12.8%
Physical Education/Health	76.4%	45.2%	23.1%

Source: Dr. David Nelson, Utah State Office of Education

An important aspect of the Utah Core Curriculum is ensuring that all students have access to the same body of knowledge. An analysis of the course-taking patterns of male and female graduates of the class of 1992 shows that male graduates continue to take more courses in mathematics, science, and physical education than do female students. As Table 3.6 shows, just over 79% of male students took three years of mathematics while the figure for females was 76.5%. A much greater disparity is seen in

Table 3.6
Percentages of Utah Male and Female High School Seniors
Who Have Taken Specific Courses for 1984 and 1992

Courses	1984		1992	
	Males	Females	Males	Females
Algebra I	77.9%	79.6%	85.5%	87.0%
Algebra II	49.8%	46.5%	66.8%	68.7%
Advanced Algebra	NA	NA	39.9%	37.0%
Geometry	50.9%	45.6%	68.7%	69.5%
Trigonometry	29.5%	19.7%	39.1%	35.4%
Biology	NA	NA	85.0%	87.8%
Chemistry	30.4%	23.0%	42.0%	49.5%
Physics	20.2%	7.9%	28.0%	16.0%
Computer-Related Course	33.7%	22.0%	59.6%	63.7%
AP History/Gov./Economics	15.9%	15.2%	27.5%	30.4%
AP English	16.9%	25/3%	21.6%	32.1%
AP Mathematics/Calculus	12.9%	7.1%	16.0%	11.3%
AP Science	NA	NA	17.7%	12.4%
AP Foreign Language	NA	NA	5.4%	7.0%
AP Music/Art	NA	NA	12.9%	14.0%
AP Computer Science	NA	NA	4.9%	1.7%

Source: Dr. David Nelson, Utah State Office of Education

the area of science. Here, 55.3% of the males and 46.4% of females report three years of course work. The percentages of Utah females taking at least three years of course work in mathematics and science have increased over the past several years, but the differences (particularly in science) are still large. Similar data are not currently available for minority students.

The findings reported above suggest that the state and district graduation requirements which were put into place in the mid-1980s have had a substantial influence on the course-taking patterns of Utah students over the last nine years. In general, most Utah students appear to be taking a more rigorous program of studies in 1992 than was true in 1984.

ALIGNING TEXTBOOKS WITH CURRICULUM OBJECTIVES

Between 1907 and 1987, the choice of textbooks to be used in Utah Public schools was under the control of the Utah State Textbook Commission and Course of Study Committee--an independent group of citizens. In 1987, the first year of the implementation of the Core Curriculum, the Textbook Commission was placed under the control of the State Board of Education to ensure that the books selected supported the Core Curriculum standards. The current selection body, the Utah State Textbook Commission, has 12 members who are appointed by the State Board of Education. They include the State Superintendent of Education (or his/her designee), the Dean of a College of Education of one of the state colleges, one school district superintendent, one secondary school principal, one secondary teacher, one elementary principal, one elementary teacher, and five lay citizens.

The Commission is responsible for reviewing textbooks, making recommendations to the State Board of Education and accepting proposals and bids from publishers for textbooks to be adopted. The main criteria for selection is that the material in the textbook is consistent with the standards and objectives of the State Core Curriculum. The Utah State Textbook Commission appoints textbook advisory committees to evaluate materials in all the designated subject areas in the core curriculum. Text materials adopted by the Commission are placed on an official Adopted Textbook list for a four year period before further review. School districts choose textbooks for adoption from the approved list. School districts are required to discontinue, at the earliest possible date, materials that are no longer on the adopted list. Under no circumstances is a text allowed to be kept in use for more than four years beyond the official expiration of the adoption period.

ALIGNMENT OF CURRICULUM WITH ASSESSMENT

The Utah student assessment programs are closely aligned with the objectives of the Core Curriculum. The Evaluation and Assessment Department of the Utah State Office of Education has developed end-of-level and end-of-course criterion-referenced tests in mathematics, reading and science. This testing program is discussed in more detail in Chapter Five.

THE NATIONAL CURRICULUM REFORM AND UTAH'S RESPONSE

In the past five years, national policy makers have recommended that the content and delivery of the school curriculum be restructured. Several recent national reform reports covering the core subjects of science, mathematics, social studies, and language arts reflect common themes within and across content areas.¹⁰⁵ These curriculum reform movements have been stimulated by the 'cognitive revolution' which has brought about radical changes in educators' views about teaching and learning.¹⁰⁶ Cognitive researchers have demonstrated that traditional didactic approaches to instruction are ineffective in developing learners' conceptual understanding. They advocate a shift in the focus of instruction from mechanical drill and practice towards teaching for understanding with an emphasis on "hands on" inquiry-oriented instruction designed to promote students' conceptual knowledge by building on prior understandings, active engagement with the subject matter content, and application to real world situations.¹⁰⁷

The recent national curriculum reports reflect an emerging consensus that the restructuring of education requires a major overhaul of school curriculum to accommodate this new view of teaching and learning. Several professional groups within education advocate major alterations in the public school curriculum in all subject areas. Although these professional reports were developed by independent subject-focused groups, they all include the following common themes:¹⁰⁸

1. Integration of curricula. Proposals include reading and writing across subject areas; alignment of texts, teachers' manuals, and assessment; and interdisciplinary teaching.
2. Emphasis on thinking skills. The findings of the National Assessment of Educational Progress (NAEP) have consistently demonstrated that the majority of students are unable to elaborate, synthesize, and solve problems. The curriculum reports indicate that this failing is related to traditional didactic approaches to teaching. Lewis found that reports point to a pattern beginning with the "minimalism" of basal readers, continuing through

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- 105 American Association for the Advancement of Science (AAAS). (1989). Science for all Americans. Washington, D.C.: AAAS; National Council of Teachers of English (NCTE). (1988). Report Card On Basal Readers. Urbana, Ill.: NCTE.; National Council of Teachers of Mathematics (NCTM). (1989). Curriculum And Evaluation Standards For School Mathematics. Reston, VA: NCTM.; National Research Council. (1989). Everybody Counts: A Report To The Nation On The Future Of Mathematics Education. Washington, D.C.: National Academy Press; National Science Teachers Association (NSTA). (1989). Essential Changes In Secondary Science: Scope, Sequence And Coordination. Washington, D.C.: NSTA
- 106 Case, R., & Bereiter, C. (1984). From Behaviorism To Cognitive Behaviorism To Cognitive Development: Steps In The Evolution Of Instructional Design. Instructional Science, 13, 141-158; Cohen, D. K. & Ball, D. L. (1990). Policy And Practice: An Overview. Educational Evaluation And Policy Analysis, 12(3) 233-240; Putnam, R. T., Lampert, M., & Peterson, P. L. (1990). Alternative perspectives on knowing, mathematics in elementary schools. IN C. B. Cazden (Ed.), Review of Research in Education (Vol. 16, pp. 57-150). Washington, DC: American Education Research Association.
- 107 Driver, R. (1983). The Pupil As Scientist? Milton Keynes: Open University Press. Lampert, M. (1986): Knowing, Doing, And Teaching Multiplication. Cognition And Instruction, 3(4), 305-342; Smith, E. L., & Anderson, C. W. (1984). The Planning And Teaching Intermediate Science Study: Final Report. (Research Series No. 147). East Lansing, MI: Michigan State University, Institute for Research on teaching.
- 108 Lewis, A. C. (1990). Getting unstuck: The curriculum as a tool of reform. Phi Delta Kappan, 71(7), 534-538.

secondary texts, and including minimum competency testing focused on discrete, unelaborated skills.

3. More rigorous content for all students. Remedial programs have been criticized for putting students at a disadvantage by using repetitious, dull instructional strategies that do not match learning styles.
4. Acknowledgment of the limits imposed by standardized tests. Educators are taking the lead in changing the nature of student assessment. It has increasingly been recognized that standardized tests impose a structure on teaching and learning. Most standardized tests focus on factual recall. Teachers who tend to teach to the test will emphasize the memorization of facts over the development of conceptual understanding.

The section below describes the national reform movements in Language Arts, Mathematics, Science, and History/Social Studies and Utah's response to their recommendations.

READING AND LANGUAGE ARTS

The National Council of Teachers of English (NCTE) has advocated a shift way from basal readers towards an integrated whole language approach.¹⁰⁹ The NCTE (1989) report Democracy Through Language advocates whole language instruction in which teachers facilitate students' learning rather than dispense information; and students are actively engaged in learning through constant use of language in meaningful ways. Recommendations included integrating oral language, writing, and literature; using literary works rather than basal readers; eliminating ability tracking; and emphasizing consistent authentic assessment by classroom teachers.

The Utah revised Language Arts Core Curriculum for grades 7-12 published in 1992 reflects these national trends. The rationale for the document embodies a shift of emphasis "from teaching isolated content and skills to a process-oriented program" (Language Arts Core Curriculum, Grades 7-12, 1982). The document stresses the interrelationship of reading, writing, speaking and listening and emphasizes that literacy should be developed in situations that are meaningful to students. The document cautions against teaching spelling, mechanics and vocabulary as isolated skills and stresses that "the instruction of formal grammar, unless directly related with the writing, reading, and speaking processes, does not help students develop communication skills." The program stresses the teaching of language arts through literature and writing and the teaching of reading and writing across the curriculum. Table 3.7 illustrates the emphasis in the New Secondary Language Arts Core Curriculum on writing and communication across the curriculum and application in relevant contexts. As noted earlier, Table 3.2 demonstrates the Elementary Language Arts Core Curriculum still focuses on teaching discrete skills.

¹⁰⁹ National Council of Teachers of English (NCTE). (1988). Report Card On Basal Readers. Urbana, Ill.: NCTE; National Council of Teachers of English (NCTE). (1989). The English Coalition Conference: Democracy Through Language. Urbana, Ill.: NCTE

Table 3.7
New Secondary Language Arts Core Curriculum

Level 7	Description of a familiar object.	Narrative based on a single personal experience.	Project/Paper on a question of personal interest.	Persuasive paper presenting a case for a personal need.	Multiple-step, multiple-sequence process paper or presentation.	Drama experiences.	These papers can be taught in any order within each grade level.	
Level 8	Character sketch of a familiar person.	Narrative based on the experience of a friend or relative.	Project/Biographical sketch of a famous contemporary person.	Persuasive paper presenting a case for meeting the needs of a friend or relative.	Letter of request or response.	Drama experiences.		
Level 9	Description of a familiar place.	Narrative based on a series of related episodes from personal experience.	Project/Paper on a local historical person, place, or event.	Persuasive paper presenting the need to solve a local community problem.	Business correspondence.			
Level 10	Description of a character using dominant impression.	Narrative based on series of related episodes from the experience of others.	Project/Paper on a topic of global concern.	Persuasive paper based on a significant international issues.	Job application.			
Level 11	Vivid description of an action.	Narrative containing conflict, character, setting, and theme.	Project/Paper on an issue of national concern.	Persuasive paper presenting the need to solve a problem of national concern.	Resume			
Level 11 Applied Communication (alternative course)	Module #1 Communication in the workplace.	Module #2 Gathering and using information in the workplace.	Module #3 Using problem- solving strategies.	Module #4 Starting a new job.	Module #5 Communicating with co- workers.	Module #6 Participation in groups.	Module #7 Following and giving directions.	
Level 12	Fictional narrative using any genre.	Analysis of a societal issue.	Solution paper.	Comparison Contrast.	Critical response.			
Level 12 Applied Communication (alternative course)	Module #8 Communicating with supervisors.	Module #9 Presenting your point of view.	Module #10 Communicating with clients and customers.	Module #11 Making and responding to requests.	Module #12 Communicating to solve interpersonal conflicts.	Module #13 Evaluating performance.	Module # 14 Upgrading, retraining, and changing jobs.	Module #15 Improving the quality of communication.

Source: Utah State Office of Education, 1992

MATHEMATICS

The new vision of teaching and learning in mathematics developed by the National Council of Teachers of Mathematics¹¹⁰ and the National Research Council¹¹¹ is grounded in the principle that students learn math by doing it in purposeful contexts. The authors of NCTM Standards want students to become "mathematically literate," which "denotes an individual's ability to use a variety of mathematical methods effectively to solve non-routine problems."¹¹² The authors of Everybody

110 National Council of Teachers of Mathematics (NCTM). (1989). Curriculum And Evaluation Standards For School Mathematics. Reston, VA: NCTM.

111 National Research Council. (1989). Everybody Counts: A Report To The Nation On The Future Of Mathematics Education. Washington, D.C.: National Academy Press.

112 National Council of Teachers of Mathematics (NCTM). (1989). Curriculum And Evaluation Standards For School Mathematics. Reston, VA: NCTM

Counts¹¹³ argue that "without the ability to understand basic mathematical ideas, one cannot fully comprehend modern writing such as that which appears in daily newspapers" (p.7).

The NCTM¹¹⁴ standards call for major changes in (a) the content of school mathematics and (b) the nature of mathematics instruction and underlying view of mathematics learning.¹¹⁵ According to the NCTM, the elementary mathematics curriculum should be broadened beyond its traditional focus on arithmetic computation to include more emphasis on conceptual understanding and on currently underrepresented mathematical domains such as geometry, measurement, and statistics. The justifications offered for these changes are largely utilitarian, focusing on the need for transformation in the kinds of mathematics that students will need in a technological, information-oriented society. The MCTM Standards authors argue that shifting from an industrial-based to an information-based society has "transformed both the aspects of mathematics that need to be transmitted to students and the concepts and procedures they must master if they are to be self-fulfilled, productive citizens in the next century" (p. 3).

They further argue that classroom instruction should move away from the traditional model of teacher as teller and students as passive recipients of mathematical knowledge to an emphasis on learning mathematics through problem solving and discussion. The emphasis in this perspective is on "knowing" mathematics rather than just "doing" mathematics. Rather than viewing mathematics learning as the mastery of concepts and procedures, the Standards authors assert that such "informational knowledge" has value only to "the extent to which it is useful in the course of some purposeful activity" (p. 7). Thus, instruction should always emphasize the acquisition and use of knowledge in the context of purposeful activity, such as problem solving, in contrast to the traditional view of mathematics teaching in which computational facts and algorithms are learned first as prerequisite skills to be applied later in the solving of problems.

Both of these reports recommend that elementary students develop number sense, which includes common sense about how to choose a method to find a solution to a problem and how to apply it to solve a problem. At the secondary level, the reports recommend that students study a common core of mathematics to acquire symbol sense and develop understanding of mathematical models, structures, and simulations that are applicable to many disciplines. It was also recommended that calculators and computers be available to all students at all times. In sum, there is growing professional consensus

113 National Research Council. (1989). Everybody Counts: A Report To The Nation On The Future Of Mathematics Education. Washington, D.C.: National Academy Press.

114 National Council of Teachers of Mathematics (NCTM). (1989). Curriculum And Evaluation Standards For School Mathematics. Reston, VA: NCTM

115 Putnam, R. T., Lampert, M., & Peterson, P. L. (1990). Alternative perspectives on knowing mathematics in elementary schools. IN C. B. Cazden (Ed.), Review of Research in Education (Vol., 16, pp. 57-150). Washington, DC: American Education Research Association.

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that mathematics knowledge should develop from individual and group experience with problems, as students are guided to search for answers to such questions.

The revision of the Utah Core Curriculum for Mathematics is based on the Curriculum and Evaluation Standards written by the National Council of Teachers of Mathematics.¹¹⁶

The new State Core has 13 standards which reflect the NCTM standards. These include:

1. The students will apply mathematical concepts and skills to solve problems they encounter in daily living.
2. The students will show understanding and application of mathematical concepts and justification of solutions to problems by communication in oral, pictorial, and or written form.
3. The students will explain and justify logical reasoning when working through (learning) a mathematical concept or solving a problem.
4. The students will recognize the inter-relatedness of mathematical concepts within the field of mathematics as well as throughout other disciplines, especially as they apply to daily living.
5. The students will employ estimation strategies in order to demonstrate flexibility in working with numbers and measurement as they relate to the students' everyday lives.
6. The students will demonstrate an understanding of numbers (number sense) as they apply to the students' everyday world.
7. The students will related combinations of numbers to other numbers by establishing relationships among operations and by acquiring insights into the effects of performing an operation on a pair or set of numbers.
8. The students will demonstrate ability in computational techniques through the use of paper and pencil, mental math, estimation, and technology to solve problems.
9. The students will use geometry to explore the relationship of objects in the world in which we live.
10. The students will understand measurements of objects with nonstandard and standard units such as the U.S. Common and metric.
11. The students will collect, organize, describe, display, and interpret data while making decisions and predictions based on that data.
12. The students will use knowledge of fractions and decimals to describe real-world phenomena and apply it to problems.
13. The students will identify and work with patterns to understand how mathematics applies in the real world.

116 National Council of Teachers of Mathematics (NCTM). (1989). Curriculum And Evaluation Standards For School Mathematics. Reston, VA: NCTM.

There are significant differences between the old and new Core Curriculum standards in mathematics. Table 3.8 includes the old and new Core Curriculum Standards in Mathematics for third grade students. In the old Standards, mathematics knowledge is skills; learning is demonstrated by replicating the activity. The objectives in the new Standards reflect a broader problem-focused approach in which students formulate, analyze, reflect on and apply mathematical strategies in every day contexts. There is the recognition that there may be multiple approaches to problem solving. Selecting and using an appropriate strategy is a function of the reasoning process, not an end in itself.

Table 3. 8
Old And New Core Curriculum Standards For Grade Three Mathematics

<u>Old Core Curriculum Standards For Mathematics</u>	
STANDARD 5030-01	The student will recognize symbolic representations for numbers.
Objectives	
5030-0101	Identify, read and write any given numeral to 10,000.
5030-0102	Recognize that multiple digit numerals are grouped into periods of three digits.
5030-103	Identify the place value of a digit in numerals to 10,000
5030-0104	Demonstrate place value to 9,999 using expanded notation; e.g., $9,999 = 9,000 + 900 + 90 + 9$; $9,999 = 9 \text{ thousands} + 9 \text{ hundreds} + 9 \text{ tens} + 9 \text{ ones}$.
<u>New Core Curriculum Standards for Mathematics</u>	
STANDARD ONE: The students will apply mathematical concepts and skills to solve problems they encounter in daily living.	
Purpose: Problem solving should be the central focus of the mathematics curriculum. As such, it is a primary goal of all mathematics instruction and is an integral part of all mathematical activity. Problem solving is not a distinct topic, but a process that should permeate the entire program and provide the context in which concepts and skills can be learned. Students should have many experiences in creating problems from the real-world activities, from organized data, and from equations.	
Objectives:	
5030-0101	Develop and apply problem-solving approaches to investigate and understand mathematical content.
5030-0102	Formulate problems from everyday and mathematical solutions.
5030-0103	Develop and apply strategies to a wide variety of problems.
5030-0104	Verify and interpret results with respect to the original problem.
5030-0105	Acquire confidence in using mathematics meaningfully.
Skills and Strategies:	
1. Solve a variety of problems (applications, puzzle problems, open-ended, patterning, multi-step etc.).	
2. Demonstrate an understanding of a problem by restating it in the students own words.	
3. Formulate a plan to solve a problem by using one or more of the following strategies:	
Use manipulative or models.	
Draw a picture or diagram.	
Choose the operation.	
Guess and check.	
4. Write a number sentence to solve a problem involving addition or subtraction.	
5. Use a calculator in appropriate problem solving situations.	
6. Recognize when a problem is similar to others previously solved.	
7. Write a problem for others to solve when given a picture, a model, or a real life situation.	
8. Determine if the answer to a problem is reasonable.	

Source: Utah State Office of Education, 1992

PROBLEM SOLVING: SCIENCE

As in language arts and mathematics, science instruction is crossing the traditional boundaries between academic disciplines. Project 2061 is a three-phase plan of action by the American Association for the Advancement of Science (AAAS) designed to contribute to the development of science, mathematics, and technology education. Phase one Science for All Americans¹¹⁷ defines a conceptual base for science reform by outlining the knowledge, skills and attitudes that all students should acquire as a result of their experiences from kindergarten through high school. The report identifies the level of scientific literacy that should be acquired by all students:

1. being familiar with the natural world and recognizing both its diversity and its unity.
2. understanding key concepts and principles of science.
3. being aware of the important ways in which science, mathematics, and technology depend on one another.
4. knowing that science, mathematics, and technology are human enterprises and knowing what that implies about one's strengths and limitations.
5. having a capacity for scientific ways of thinking for individual and social purposes.

In phase II, AAAS is now developing alternative curriculum models to put scientific literacy into the public schools. Implementation of the recommendations will occur in Phase III.

Curriculum reform has also been on the action agendas of the National Center for Improving Science Education (NCISC, 1989) and of the National Science Teachers Association¹¹⁸. The National Center's report on elementary science calls for an emphasis on science that equals that of other core subjects. The report states that science instruction should focus on fewer topics in more depth and on the skills needed for investigating and problem solving. NSTA's 1989 report, Essential Changes in Secondary Science: Scope, Sequence and Coordination, indicates that formal, integrated scientific study should begin in the seventh grade with emphasis on the description of phenomena that will prepare students for more abstract concepts. The revision of the Utah Core Curriculum Standards in science will begin in 1993.

HISTORY-SOCIAL STUDIES

The teaching and learning of history and social studies have also been criticized for focusing on the teaching of discrete skills and emphasizing factual recall. These criticisms have been underscored by the findings of national surveys indicating serious gaps in students' knowledge. In a survey of the

117 American Association for the Advancement of Science (AAAS). (1989). Science For All Americans. Washington, D.C.: AAAS.

118 National Science Teachers Association (NSTA). (1989). Essential Changes In Secondary Science: Scope, Sequence And Coordination. Washington, D.C.: NSTA

knowledge of nearly 8,000 17-year old students, in the field of American history, the average student answered only 54.5% of the questions correctly.¹¹⁹ Charting a Course: Social Studies for the 21st Century, a report by the National Commission on Social Studies in the Schools, emphasizes that social studies is a multidisciplinary subject and includes "history, geography, government and civics, economics, anthropology, sociology and psychology as well as subject matter drawn from the humanities--religion, literature, and the arts" (p. 3). To deal with this diversity of content, the report recommends that the subject of social studies focus on fewer topics in greater depth and "combine those fields and use them in a direct way to develop a systematic and interrelated study of people in societies, past and present" (p. 3). The revision of the Utah Social Studies Curriculum is planned to begin in 1994.

TECHNOLOGY

The introduction of technology into the public schools is viewed, both locally and nationally, as an important tool for restructuring schools and improving teaching and learning in U.S. classrooms.¹²⁰ Over the past three years in Utah, substantial amounts of public and private money have been invested in an effort to "computerize" instruction. In 1990, the Utah State Legislature approved the Educational Technology Initiative, which was designed to put technology applications into Utah public schools. In the past three years, the state legislature through the Utah Educational Technology Initiative (ETI) has made available approximately 42.8 million dollars to Utah school districts and colleges of education for the purchase of educational technology and the training of teachers to use this technology. In addition, school districts and colleges of education have matched this funding with one dollar of their own funds with every three dollars they have received from the ETI. Utah businesses and technology vendors have also contributed to the Utah Educational Technology Initiative by selling hardware and services at discounts or by providing staff training. Over 100 million dollars (see Table 3.9) have been devoted to educational technology in Utah in the past three years.

This massive investment of resources in the ETI demonstrates Utah policy makers' belief that educational technology has the potential to increase student achievement, improve school functioning, influence curriculum change, and contribute to teachers' professional growth. Findings of two recent evaluations of the ETI indicate that technology is being used more frequently in Utah public schools but that it is being used in traditional ways, i.e., it is not being used to restructure curriculum or

119 Ravitch, D. & Finn, C. E. (1987). What Do Our 17-Year-Olds Know? New York: Harper Row.

120 Stoddart, T. & Niederhauser, D. Technology and Educational Change. Computers in the Schools. (in press)

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instructional practice. All the findings reported below are drawn from the Mergendoller et al reports.¹²¹

Table 3.9
Funding of the Educational Technology Initiative, 1990-1992
(All Figures in Millions)

Allocation from the state legislature	\$42.8
Vendor discounts and training services	\$21.8
Support from business and industry	\$5.7
District and college matching funds	\$26.3
Grants from technology and other companies	\$11.1
Total	\$107.7

Source: Utah State Office of Education, 1992

As a result of the ETI, there are more computers in Utah public schools, and teachers and students have increased their use of technology. In elementary schools the average student to computer ratio declined from 20 to 1 to 11 to 1; in high schools, the average computer to student ratio has declined from 10 to 1 during the 1989-90 school year to 6 to 1 during the 1990-91 school year. In schools receiving funding during the initial year of ETI, the average elementary student spent approximately 60 minutes a week using a computer and the average secondary student 135 minutes a week.

In the three year period from 1989-92, teachers doubled the amount of time they spent using technology for instructional purposes. Elementary teachers increased from an average of 1.26 hours per week to an average of 2.99 hours per week, and secondary school teachers increased their average use from 3.4 hours to 7.8 hours per week. At both levels of schooling, teachers in the higher grades reported using computers significantly more than in the lower grades.

The majority of instructional use by elementary school teachers involved in the ETI is in support of the core curriculum. Over 80% of these teachers use computers to instill basic skills through drill and practice. Less than 60% of these teachers use computers for stimulating creativity and higher order thinking. Fewer than 15% use technology as a presentation or telecommunications medium. Elementary computer users use the technology considerably more to support mathematics instruction than to support reading or writing.

Over 70% of secondary school teachers actively involved in the ETI use computers for word processing. Secondary school teachers use computers significantly more to teach writing than for reading or mathematics. About 60% use computers for drill and practice, for the development of basic skills in the core curriculum, and for developing higher order thinking skills.

121 Mergendoller, J., Stoddart, T., Horan C., Niederhauser, D. & Bradshaw, D., (1991) Instructional Utilization: Teacher Training and Implementation of Utah's Educational Technology Initiative in School Districts and Colleges. Novato, CA: Beryl Buck Institute for Education.

The authors of the evaluation of the ETI conclude that Utah teachers are using technology in traditional ways.¹²² The dominant use of technology in elementary education is for drill and practice in mathematics and in secondary education for word processing. Mergendoller et al believe this restricted use of technology by Utah teachers is closely related to their lack of training. The majority of teachers received less than ten hours of technology training, and almost one-half received no training at all. They found that teachers who received training were more likely to use computers in sophisticated ways and to increase their focus on higher order thinking skills and conceptual understanding. They recommend that more technological training be given to teachers.

CURRICULUM REFORM: IMPLICATIONS FOR UTAH

Nationally and locally, curriculum and instruction are in a period of transition. Over the past ten years, the "cognitive revolution" has radically changed educators' views of the teaching and learning process.¹²³ A shift from behaviorism to constructivism has been accompanied by an emerging view of individuals as active participants in the learning process who construct meaning through experience and develop personal theories about the physical and social world. Educational reformers advocate a shift in the focus of instruction from mechanical drill and practice towards teaching for understanding with an emphasis on "hands on," inquiry oriented instruction. This new view of learning has been the basis of the curriculum reform efforts in language arts, mathematics, science and social studies discussed above.

In Utah, these new views of teaching and learning have already been integrated into the secondary Language Arts Curriculum and the K-8 mathematics curriculum. Other curriculum areas, such as science and social studies, will be revised in the near future. The rewriting of the curriculum, however, is only the first step in the curriculum reform process. The new curriculum has important implications for the design of both the student assessment program and pre-service and in-service teacher education.

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- 122 Mergendoller, J., Stoddart, T., Horan C., Niederhauser, D. & Bradshaw, D., (1991) Instructional Utilization: Teacher Training and implementation of Utah's Educational Technology Initiative in School Districts and Colleges. Novato, CA: Beryl Buck Institute for Education
- 123 Case, R., & Bereiter, C. (1984). From Behaviorism To Cognitive Behaviorism To Cognitive Development: Steps In The Evolution Of Instructional Design. Instructional Science, 13, 141-158; Cohen, D. K. & Ball, D. L. (1990). Policy And Practice: An Overview. Educational Evaluation And Policy Analysis, 12(3) 233-240; Putnam, R. T., Lampert, M., & Peterson, P. L. (1990). Alternative perspectives on knowing mathematics in elementary schools. IN C. B. Cazden (Ed.), Review of Research in Education (Vol., 16, pp. 57-150). Washington, DC: American Education Research Association.

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STUDENT ASSESSMENT

At the national level, educational reformers have argued that change in the focus of instruction must be accompanied by a parallel change in the way students are assessed.¹²⁴ Currently, most states including Utah rely on standardized tests such as the Stanford Achievement Test to evaluate student outcomes. Such tests tend to focus on the evaluation of factual recall, use of procedures and measurement of discrete skills. Educational reformers argue that such assessment procedures need to be broadened to include the use of problem solving and analysis skills in more complex "real world" situations. They advocate a move towards performance assessment which evaluates students' ability to: (1) bring a number of skills to bear on complex, multi-step problems; (2) structure the problems; (3) integrate many separate pieces of knowledge and several thinking processes in on one task; (4) find multiple paths and solutions; and (5) reflect on and evaluate their own performance.

The problem is that performance assessment is in the early stages of development. There are currently no large-scale performance assessment programs available. The development of new curriculum is ahead of the testing program. In Utah, the move towards integrated performance assessment with standardized tests is beginning. The Evaluation and Assessment Department of the State Office of Education is working with an independent contractor to develop performance assessment items in the curriculum areas of mathematics, science, and social studies. These items will be field tested in Utah schools in 1993-94.

TEACHER EDUCATION

The success of any curriculum reform initiative is dependent on the knowledge and skills of teachers. The new reform programs advocate an emphasis on the development of students' understanding. A large body of research, however, has demonstrated that many teachers have limited conceptual understanding of the subject matter they teach--particularly in the curriculum areas of mathematics and science.¹²⁵

Part of the problem is that reform efforts have tended to focus on student learning not teacher learning. It is typically assumed that teachers, if provided with innovative curricula and shown how to use them, will be able to effectively implement them in their classrooms.¹²⁶ This is not the case. To teach conceptually, an instructor needs to understand the content conceptually. Many teachers,

124 Finch, F. L. Issues in Educational Performance Evaluation. In F. L. Finch (Ed.) Educational Performance Assessment Chicago: The Riverside Publishing Company, 1991. Stiggins, R. J. Facing the Challenges of a New Era of Assessment. Applied Measurement in Education. Vol 4, No. 4, 1991.

125 Ameh, C., & Gunstone, R. (1988). The Understanding Held By Nigerian Science Teachers Of Some Science Concepts. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.; Ball, D. (1988). Knowledge And Reasoning In Mathematical Pedagogy: Examining What Prospective Teachers Bring To Teacher Education. Unpublished doctoral dissertation, Michigan State University, East Lansing; Peck, D. M., & Connell, M. L. (1991). Using Mathematical Materials To Develop Mathematical Intuition. Focus On Learning Issues In Mathematics, 13(4) (pp3-12). New York: SUNY.

126 Shulman, L. Those Who Understand: Knowledge Growth in Teaching. Educational Researcher. Vol 15, No. 2, 1986.

however, are seriously deficient in their understanding of the subject matter they teach because they have learned their content through the same ineffective traditional methods reformers are seeking to replace. Teachers who do not hold strong content understandings tend to teach didactically--relying on "expert" sources such as textbooks and content lectures to transmit information to their students.¹²⁷ Breaking this didactic teaching-learning-teaching cycle will require a new emphasis on teachers as learners and on the pedagogy practiced in college and university courses.

The Utah State Systemic Initiative to Reform Mathematics and Science education is developing a new model of staff development and pre-service to help teachers restructure their understanding of both subject matter and pedagogy in order to begin teaching conceptually. In this approach, teacher education begins with their teacher's personal understanding of the subject matter. Experienced and novice teachers first learn content through the conceptual methods they will use to teach their students. They are then supported at the school site for an extended period of time in applying the new methods with their students. A similar focus on the teacher as the learner can also be found in the workshops of the National Writing Project.

CONCLUSION

In the last decade, there have been significant changes in the curriculum taught in Utah public schools. These changes occurred in two main stages. Stage one marked an increase in rigor. Policy makers and educators, concerned about the dilution of the curriculum, recommended the development of a rigorous program of study required of all students. Core Curriculum Standards were developed and high school graduation requirements were increased. These new standards have had a significant impact on student course-taking patterns. The majority of Utah secondary school students are now taking at least two years of English, history/social studies, mathematics and science. As a result of this first stage of reform, Utah students are taking a more rigorous program of studies in 1992 than was true in 1984.

The second stage of reform marks a shift from rigor to understanding. Nationally and locally educational reformers are concerned that students not only take a more rigorous program of study but also develop substantial understanding of the content they are learning. The current reform movement advocates a shift from rote learning, emphasizing the memorization of discrete skills and facts to teaching for understanding that emphasizes problem solving in complex real world contexts. Utah educators have once again begun the process of restructuring the curriculum. New standards have been developed for mathematics and language arts with other subjects to follow.

Education reform only begins with the writing of a new curriculum. As is discussed above there are many obstacles to implementation. Utah is only beginning this process. The implementation of

127 Tilgner, P.J. (1990). Avoiding science in the elementary school. *Science Education*, 74(4), 421-431; Twomey-Fosnot, C. (1987). *Inquiring Teachers, Inquiring Learners*. New York: Teachers College Press.

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this new phase of curriculum reform will require substantial changes in the student assessment program and in approaches to staff development and pre-service teacher education. The projects discussed above, however, indicate a willingness on the behalf of Utah educators to experiment with new approaches.

CHAPTER FOUR: SPECIAL INSTRUCTIONAL PROGRAMS & SERVICES TO UTAH SCHOOL CHILDREN AT-RISK

By Dixie Snow Huefner

OVERVIEW

Tens of thousands of Utah school children are the beneficiaries of special instructional programs and auxiliary services. Among these programs are the following:

- * Special education programs for students with eligible disabilities,
- * Chapter I remedial programs in schools with given proportions of economically disadvantaged students,
- * Programs for students with limited English proficiency (LEP),
- * Programs for gifted students,
- * Drug and alcohol abuse-prevention programs,
- * Programs to prevent teenage pregnancy,
- * Migrant education programs,
- * Programs for homeless children,
- * MESA programs to improve math and science education for females and minority students, and
- * Youth in custody programs.

Many of these programs are funded or partially funded with federal monies; others are entirely state funded. (See Table 4.1 on next page.) Programs receiving federal money are implemented in accordance with federal mandates while some of the state-funded programs offer wide leeway to local school districts to implement in accordance with district standards. The drug and alcohol abuse-prevention programs reach all of Utah's students while the others are targeted to discrete subgroups of students. Most of these programs are overseen by the Students-At-Risk Section (SARS) of the Utah State Office of Education (USOE),

HIGHLIGHTS

- * More than 40% of Utah's school children are considered at risk for school failure.
- * The largest group of children at risk are special education students, who constitute approximately 10% of Utah's school-age population.
- * Economically disadvantaged students receiving federal Chapter I services constitute another large group of the school-age population considered at risk.
- * Among recent changes in special education programming are a shift in the state funding formula, a requirement for transition planning in preparation for post-school options, and educational services for all 3-5-year-old preschool students with disabilities.
- * The Students-At-Risk Section (SARS) of the USOE is encouraging the inclusion of students with disabilities in regular schools and classrooms with appropriate support services.
- * To reduce the high risk of school failure among many of Utah's school children, SARS has new programs underway to enhance interagency collaboration and the involvement of parents in their child's education.

which is responsible for distributing "flow-through" and earmarked state and federal funds to the local school districts for various programs. Programs for LEP students and gifted students, however, fall outside the responsibilities of the Section.

Table 4.1
FY 93 Budget Data, Utah Students At Risk

Name of At-Risk Program	Federal Budget	State Budget	# of Students Served, 1991-92
Alcohol/Drug/Tobacco Prevention	\$1,919,626.	\$100,000.	452,650.*
At Risk Program:	\$ 0.		177,893.**
Gen'l At-Risk Flow Through	\$1,718,240.		
Pregnancy Prevention		\$702,000.	
Homeless & Minority		\$623,000.	
MESA		\$156,000.	
Family Involvement		\$223,000.	
(Total At-Risk)		(\$3,422,530)	
Chapter I:	\$ 18,988,132.	\$ 0.	30,513.
Migrant Education	\$ 836,883.	\$ 0.	1,654.
Neglected & Delinquent	\$ 166,315.	\$ 0.	832.
Corrections Education	\$ 0.	\$ 933,600.	750.***
GED	\$ 0.	\$ 7,000.	4,724.
Special Education (Ages 3-21)	\$ 23,224,926.	\$ 97,079,460.	46,602.
Voc/Ed. for Homeless Children	\$50,000.	\$ 0.	5,187.
Youth in Custody	\$ 0.	\$4,574,300.	9,036.****
TOTALS	\$ 45,185,882.	\$106,122,890.	729,841.*****

* statewide #, including private schools
 ** estimate (40% of school-age population)
 *** number of students in prison(s) is 3,037
 **** ADM equivalents
 ***** duplicate count

Table adapted from September 1992 figures supplied by USOE, Students At Risk Section

In 1988 the USOE prepared a state Master Plan for Students at Risk¹²⁸ addressing the key service needs of students at risk. According to the Master Plan, "a student at risk is any student who, because of his/her individual needs, requires some kind of uniquely designed intervention in order to achieve literacy, graduate, and be prepared for transition from school to post-school options." The Master Plan recommends service delivery systems that involve the family and the business community to the maximum extent feasible. The Master Plan also proposes extensive interagency collaboration. Implementation of both the family/business involvement and the interagency collaboration recommendations is in the early stages. The Plan estimates that more than 40% of Utah's school

128 See Utah State Board of Education, Master Plan for Services for Students at Risk, 1988.

Special Programs

children are at risk. The SARS recently corroborated the earlier estimate by extensive interviews with administrators of Utah's 40 school districts.¹²⁹

As noted above, services to Utah's gifted and talented students do not fall within the responsibility of the SARS. Three "Accelerated Learning" programs are currently funded entirely with state funds: Gifted and Talented, Advanced Placement, and Concurrent Enrollment. Statistics are not being kept on the numbers of students being served in Gifted and Talented programs, nor has the USOE been enforcing its requirements for identifying students as gifted and talented. The state monies flow through to each local school district, essentially for expenditure according to district standards. For FY 93 (school year 1992-93), state funds were allocated as follows:

Gifted and Talented	\$ 1,210,000
Advanced Placement	\$ 946,000
Concurrent Enrollment	\$ 474,000.

Responsibilities for services to students who are limited English proficient (LEP) also do not fall under the SARS, and state funding is no longer identified by a separate line item in the state budget. The 1992 Utah Legislature decided to eliminate categorical funding for all of the 16 so-called "special purpose optional programs" (LEP services, media services, textbooks, special needs, classroom size reduction, etc.). Because funding for these programs was "rolled" into the increased dollar value of the weighted pupil unit (WPU--the basis for funding under Utah's School Finance Law), local school districts are now free to spend these formerly earmarked funds on whatever needs they wish to prioritize within their districts, including these "special purpose optional programs." Although the earmarking has been lost for LEP funds at the state level, approximately six school districts collectively receive each year more than 1 million dollars of federal funds earmarked for LEP students under Title VII of the Elementary and Secondary Education Act and federal "emergency immigrant" program funds. The state office currently receives \$75,000 for state office support of local district programs funded under Title VII. The state-level funds support a state director of Bilingual Education, as well as travel costs, technical assistance, equipment and supplies, and training programs. The USOE reports that 23,598 students were identified during FY 92 as LEP students. It believes, however, that these figures underreport the actual number of LEP students because the numbers basically reflect just those students who are the children of immigrant parents and do not include those whose parents' native language is not English or who are bilingual but speak another language in the home. The USOE data shows that limited numbers of LEP students benefit from the federal dollars and that most of the 23,598 LEP students are not receiving any language development services.

The two largest programs serving students at risk are the special education program and the Chapter I program. The scope and funding for each are described below.

¹²⁹ See Utah State Office of Education. School District and Interagency Collaborative Services for Students At Risk in Utah: A Report of On-Site Visits, October 1992.

SPECIAL EDUCATION PROGRAMS

In 1969 the Third District Court of Utah ruled in Wolf v. State Legislature that the USOE was responsible for the education of all students with disabilities, some of whom had been served previously in day-care centers. In response, the Utah State Legislature amended Utah's Education Act to require the identification of all Utah students with disabilities and to provide for their education within the Utah public schools.¹³⁰ Prior to the amendments, many children with severe disabilities had not had access to a public education.

In subsequent years, the federal government enacted legislation to help states with the excess costs of educating children with disabilities. Part B of the Individuals with Disabilities Education Act (IDEA)¹³¹ establishes a formula whereby each participating state receives an annual amount based on a head count of students enrolled in special education programs as of December 1st of each year. The amount for the 1992-93 school year is the equivalent of about \$442 per identified student, plus \$803 per preschool student ages 3-5. States accepting money under the statute must assure that each eligible student with disabilities has available a "free, appropriate public education" in the least restrictive environment appropriate to his/her needs. The delivery of special instruction and needed related services must be directed by a written, individualized education program (IEP). Parents are expected to participate in the development of their child's IEP and are also given a number of other procedural rights to help avoid arbitrary or poorly considered decision making by the schools. Among these are 1) the right to notification and consent at various stages, 2) the right to access their child's educational records, 3) the right to obtain an independent educational evaluation if they disagree with the school's evaluation; and 4) the right to an impartial hearing to resolve evaluation, programming, and placement disputes.

During the 1991-92 school year, 46,602 Utah students (approximately 10% of the school-age population) received special education services under one of the following disability labels:

- * Hearing impairments, including deafness,
- * Visual impairments, including blindness,
- * Orthopedic impairments,
- * Other health impairments,
- * Serious emotional disturbance,
- * Mental retardation,
- * Specific learning disabilities,
- * Speech and language impairments,
- * Deaf-Blind, and
- * Multiple disabilities.

130 See U.C.A. § 53-18-1 et seq.

131 20 U.S.C. § 1400 et seq.

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The U.S. Congress recently has added autism and traumatic brain injury to the list of separate disabilities for which federal funding is available, and these categories will be reflected in subsequent counts of children served. Prior to the addition, many children with these disabilities were served under the category of "Other Health Impaired." The vast majority of special education students are served in regular classrooms accompanied by special education support services, "pull-out" services in "resource rooms" for a portion of the school day, or both. The FY 93 federal allocation to Utah amounts to approximately \$23 million or nearly 20% of Utah's total state and federal special education budget of \$120 million.

The formula for disbursement of state special education funds was modified during the 1992 Utah legislative session. For the 1992-93 school year, approximately \$90 million of the \$97 million in state special education monies were disbursed to local school districts based on the total number of 1989-90 weighted pupil units (WPU) generated by services to special education students in each district. In the future, this disbursement will be supplemented by an amount proportional to overall student enrollment growth in the school district or special education enrollment growth, whichever is smaller. Prior to the funding change, services to special education students had generated WPUs ranging from 1.6 to over 6.0 per student depending on the intensity of services delivered to the student. The actual number varied each year. Now, the average WPU weighting of 1.53 generated by services to each special education student in 1989-90 has become the foundation for future special education funding growth. (See Finance chapter for additional information on the new funding formula.) Together, the state and federal contributions for the excess costs of special education services (above and beyond the \$3092 average per pupil expenditure in Utah for 1991-92)¹³² currently average approximately \$2250 per student.

CHAPTER I SERVICES

Chapter I programs are federally funded programs initiated in 1965 under the federal Elementary and Secondary Education Act. Then entitled Title I programs, they provide dollars for remedial education services in schools that have significant proportions of students who are below the poverty level. In 1981, Title I became Chapter I of the Education Consolidation and Improvement Act. According to the USOE, 30,513 students received basic Chapter I services during the 1991-92 school year or approximately 6-7% of the school-age population.

The FY 92 federal appropriation (FY 93 allocation) to Utah for its share of the basic Chapter I funds was \$18,988,132. The FY 93 appropriation is expected to exceed \$21,000,000. Because of Utah's 1990 census data, funds are expected to rise by 15-20% beginning with FY 94. The funding formula for Chapter I programs works to the disadvantage of states such as Utah, as weightings favor

¹³² This figure, consistent with the national definition of per pupil expenditures, is based on maintenance and operation costs and does not include capital outlay figures.

states that have the highest per pupil expenditures. If the funding formula were based instead on the national average per pupil expenditure, Utah would stand to gain approximately 30% more in Chapter I dollars.

Chapter I programs are in all 40 local school districts. Some students receive help in reading, others in math, others in language arts, others in two or more of these areas. If an individual school is eligible for Chapter I monies because of the percentage of its students who meet the Chapter I (income-based) guidelines, the services can be extended to all those students who need them regardless of income level. Services are to be provided first to those with the greatest educational need.

STATE AND FEDERAL MONITORING AND ENFORCEMENT FUNCTIONS

Various offices within the federal Department of Education are responsible for implementation and enforcement by the states of the requirements of federal funding statutes. In turn, the USOE is responsible for assuring compliance by all local school districts, state operated programs, and public agencies with the requirements of the federal special education statute, Chapter I, and other federal education funding statutes.

The Office for Civil Rights (OCR) in the federal Department of Education has the responsibility for enforcing the provisions of federal civil rights laws in educational institutions. The regional OCR office responsible for investigating complaints, conducting compliance reviews, and offering technical assistance to Utah education agencies is in Denver. OCR is active in assuring that schools do not discriminate on the basis of race, ethnic or cultural background, gender, disability, age, or religion.

SELECTED RECENT TRENDS

SPECIAL EDUCATION

Within the field of special education, a number of recent developments have significance for readers of this report. The developments can be grouped into four areas: (1) the newly developed "Utah Agenda" to meet the needs of students with disabilities, (2) updates to state special education rules, (3) recent federal court decisions that are binding within the state of Utah, and (4) new preschool and early intervention programs.

The Utah Agenda

In May 1991, a steering committee, appointed by various organizations with the facilitation of the USOE, was charged with developing a strategic plan to address the needs of Utah students with disabilities. The committee's work was seen as fitting within the larger Utah State Public Education Strategic Plan which envisioned education reform reaching **all** students. The committee, made up of public and higher educators, legislators, consumers of disability services, and social service personnel,

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prepared a statement of core beliefs, a mission statement, objectives, strategies, and action plans. Overall, their document, entitled the "Utah Agenda," focuses on the need to coordinate information, resources, and services for students with disabilities to enable them to be contributing members of society both during and after their school years. More specifically, the Utah Agenda calls for:

- * better education of the public concerning the continuing needs of persons with disabilities,
- * equitable and adequate funding for services to students with disabilities,
- * valid curriculum measured by student outcomes, and
- * successful interagency collaboration.

Strategies have been developed to implement these objectives on a staged basis over time. Among other things, they emphasize recruitment and retention of trained personnel, transition programs for students with disabilities from birth through age 21, development of social competence at the level achievable by each student with disabilities, and an end to the perception that special education is a separate service system.

The Utah Agenda has been adopted by the USOE Students-At-Risk Section as their strategic planning document to guide services to students with disabilities. Specific action plans are being guided by the strategies outlined in the document.

Changes in State Rules

Because the federal special education statute (IDEA) was amended in 1990 and 1991, the USOE is preparing a modified set of state rules to reflect the federal changes. Among the important proposed changes is the inclusion of autism and traumatic brain injury as distinct and now politically visible conditions that allow a student to be eligible for special education services.

Other important anticipated changes include:

- * the requirement for transition plans in all IEPs of students who are sixteen years of age or older and for young children making the transition from early intervention to preschool programs and from preschool programs to regular school age programs;
- * requirements for providing assistive technology services and devices to eligible students;
- * the inclusion of therapeutic recreation and rehabilitation counseling among the list of specified related services that can be made available to students who need them.

The most controversial change under consideration in the state rules is the removal of the ceiling on the number of students who can be served on a teacher's special education caseload without a waiver from the state. The cap has been at 35 students for over a decade and was originally established to allow for funding of the average teacher salary as well as to protect against teacher overloads and overcrowding in resource rooms. The USOE is proposing to replace the numerical cap

with a paragraph stating that districts must have policies to employ appropriate numbers of qualified staff. Many teachers, parents, and teacher-training institutions are fearful that removal of the cap may create unmanageable case loads in many resource classrooms. Districts, on the other hand, argue that they need the flexibility to decide which programs can be larger and which can be smaller depending on the nature of the instruction and the needs of the students. The Utah State Board of Education Advisory Committee for the Handicapped (USBEACH)--made up of consumers and service providers--has taken the position that elimination of the cap should be allowed only if districts submit accountability plans documenting student outcomes in classrooms not operating under the cap. The USOE is reluctant to keep or adopt rules that go beyond the federal requirements and that might have the effect of encouraging additional litigation of the rights of special education students. In addition, the USOE believes that because it is 1992 and no longer 1975 and because districts are willing to be held accountable in a system without specific numerical caseloads, the proposed caseload rule should be considered. Despite the lack of consensus on this issue, the proposed elimination of the cap remains in the latest proposed version of the rules. Final adoption of the rules is expected in early 1993.

Litigation Update

Three federal court decisions that are binding in Utah, one in Utah federal district court and two in the U.S. Court of Appeals for the Tenth Circuit, have been handed down within the last year or two and are important for policy makers to understand. The most recent is Granite School District v. Shannon M.¹³³ Shannon M. is the first and only federal district court case in Utah that addresses special education law. It raised the issue whether federal law required the school district to pay for continuous nursing care in an elementary school setting in order for a medically fragile, orthopedically impaired student to have access to special education in the least restrictive environment appropriate to her needs. Under the IDEA, school districts are obligated to provide related services needed to enable a disabled student to benefit from special education. Medical treatment, however, is excluded as a related service. Therefore, the question before the court was whether full-time nursing care by an RN was a form of medical treatment or whether it was a related service under the Act. Decisions in the federal courts on this issue across the country have varied somewhat.

The court held that, in spite of the fact that nursing care is not provided by licensed physicians, it was nonetheless a medical service thereby negating any school district financial obligation for its provision. According to the court, the estimated cost of full-time nursing care was \$30,000 per school year. Obviously, a decision that full-time nursing care could be a related service would have had significant implications for school district budgets.

133 787 F. Supp. 1020 (D. Utah 1992).

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The court in Shannon M. also ruled, in effect, that even if full-time nursing service by an RN could be considered a related service, it was not needed to provide Shannon with the IDEA-mandated free appropriate public education (FAPE) in the least restrictive environment appropriate to her needs. In the court's view, Shannon was receiving enough benefit from her home program to satisfy the FAPE standard. Moreover, the court noted that the expense of providing for Shannon's care "would undoubtedly take money away from other programs." This factor, along with "concern for Shannon's safety," led it to conclude that she could not be educated satisfactorily in her elementary school. Therefore, a mainstream setting was judged not to be the least restrictive environment for Shannon. This part of the decision is quite cursory, but its import seems to be to allow cost to be an important consideration in determining what constitutes the least restrictive environment. How this portion of the decision will be applied to other students with disabilities who seek placement in their neighborhood schools over the objection of their school districts remains to be seen. (For the implications of the movement to place students in their neighborhood schools, see the final section of this chapter.)

Two other cases that are binding in Utah were decided in 1991 by the U.S. Court of Appeals for the Tenth Circuit, within whose jurisdiction Utah falls. Johnson v. Independent School District No. 4¹³⁴ provides standards for the provision of extended school year (ESY) services to special education students. The court in Johnson held that, in deciding whether to offer summer school services to students with disabilities, school districts cannot limit themselves solely to documentation of past regression. Instead, they also must consider predictions of future regression based on the opinion of professionals "in consultation with parents" as well as on consideration of the child's circumstances "at home and in [the] neighborhood and community." Although the Utah Special Education Rules place heavy emphasis on the determination of past regression, they also leave room for professional judgment. State special education officials believe that the Utah Rules are broad enough to accommodate the multi-faceted inquiry mandated by the Johnson case.

The other case of special significance to Utah is A.E. v. Independent School District,¹³⁵ which ruled that a student with a learning disability (in math) and a conduct disorder related to emotional problems was not seriously emotionally disturbed (SED) as defined in federal law. The student had been suspended from school for theft, fighting, tardiness, smoking, disruptions of class, and use of improper language--misbehaviors that the school had determined were not related to her learning disability. After what the court described as "a suicidal gesture," the student was admitted to a hospital psychiatric unit where she remained for several months. The student's psychologist recommended placement the following fall in a class for SED students. The school declined to

134 921 F.2d 1022 (10th Cir. 1991).

135 936 F.2d 472 (10th Cir. 1991).

classify the student as SED and proposed an IEP dealing with her special education problems in a mainstream classroom. The school's actions were upheld.

The case is significant for its holding that this student's conduct disorder did not fall within the federal definition of serious emotional disturbance. Utah schools have debated whether to serve children with conduct disorders under the special education umbrella; they now have judicial support for not doing so. The decision, however, merely affirms the findings of fact by the lower court and does not analyze the federal SED definition nor why the student's particular problems fell outside of it.

Preschool & Early Intervention Programs for Children with Developmental Delays

In 1986, the federal government passed two important amendments to IDEA, both directed at helping fund state programs that deliver services to young children with developmental disabilities and developmental delays. Congress recognized that research has shown repeatedly that early stimulation and systematic instruction in language, motor, and social skills, along with family support, are important to successful outcomes for children with developmental delays. The federal funding programs are based on the philosophy that "an ounce of prevention is worth a pound of cure." One program target preschool services, the other early intervention services.

With the added financial support, Utah's public schools five years ago began identifying and serving preschoolers between the ages of three and five who had eligible disabilities or developmental delays. Children served in these programs have the same rights under Part B of IDEA as students age 6-21: the right to a free, appropriate public education in the least restrictive environment with an individualized education program. Their parents have the same procedural rights as those extended to parents of older students. Over the past several years, Utah has identified and served an increasing number of eligible pre-school children. Beginning with the 1991-92 school year, IDEA required that states accepting preschool monies under the statute be providing a free appropriate public education to **all** preschoolers with disabilities or developmental delays. The number of such children in Utah is approaching 2500 students. The school districts are free to establish preschool classrooms within public schools or to contract with private providers to deliver services to preschoolers in private educational settings. Utah's service delivery pattern, mostly within public school buildings, is among the more integrated public school models in the country.

Also in 1986, Part H of IDEA was enacted creating a federal financial incentive program to encourage states to establish early intervention services for children from birth through age two who are developmentally delayed or at-risk of developmental delay. Federal funds are available to states that agree to its conditions. States are allowed to determine which agency will be the lead agency in delivering early intervention services. In Utah, the Department of Health is the lead agency. In each state, an Interagency Coordinating Council is responsible for developing the roles of each agency (Education, Social Services, Health, etc.) and for coordinating early intervention services. In Utah, the current chair of the Council is a parent.

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Federal grants under Part H are based on state-by-state census data of infants and toddlers in the eligible age ranges. Although states have complained that the funding is not generous enough to enable major early intervention programs, many states have applied for the funds and collectively have produced a variety of service delivery models. Regardless of the delivery model, each child served is to have an Individualized Family Service Plan (IFSP) to coordinate resources and agency services. As the name implies, families are to be important participants in the development of the IFSP, and family strengths and needs are to be reflected in the plan. Utah's early intervention plan is conceptualized as one that links existing services and natural supports rather than one that constructs an entirely separate and new service system. Additionally, Utah's plan calls for family-centered services rather than mere parental participation in the development of services to the infant.

Substance Abuse Reduction

The 1991 Utah Legislature allocated \$1.9 million in the human services budget to fund youth drug treatment programs. Private service providers, however, were dependent on the schools as a primary source of referral; and schools were reluctant to refer, lest they become liable for the financial costs of the treatment. In the autumn of 1991, a joint resolution was adopted by the Utah State Board of Education and the Utah State Board of Substance Abuse that should allow the two agencies to work together to serve student substance abusers. The resolution clarifies that when a school initiates a referral to a publicly funded substance abuse program, the Local Educational Agency (LEA) will not be held responsible for the treatment costs incurred. Educational services will remain the responsibility of the LEA, however, whether within the public school or the treatment center. This resolution is consistent with emerging federal case law holding that drug treatment is medical treatment under federal special education law (IDEA) rather than a related service. In fact, the federal court's analysis in Granite School District v. Shannon M. of what constitutes medical treatment supports such a position.

Corporal Punishment

The 1992 Utah Legislature passed, and the governor signed, a bill prohibiting corporal punishment in Utah schools unless parental permission is granted.¹³⁶ Corporal punishment is defined in the statute as "the intentional infliction of physical pain upon the body of a minor child as a disciplinary measure." In August 1992, the State Board of Education went further than the statute and adopted a policy prohibiting corporal punishment in the public schools, even with parental permission. Neither the statute nor Board policy prohibits reasonable and necessary physical restraint or appropriate force to obtain possession of a weapon, to protect a person from physical injury, to remove a violent or disruptive child from a situation, or to protect property from being damaged.

136 U.C.A. § 53A-11-701 et seq.

The statute was the culmination of several years of effort to reach compromises that would satisfy private schools and advocates for students with disabilities. Two compromises resulted in limitations on the scope of the statute. The first limitation allows private (including parochial) schools to exempt themselves from the prohibition by notifying parents of a contrary policy within the private school. The other compromise provides that "behavior reduction intervention" which complies with Utah's Special Education Rules is excepted from the prohibition. Special educators wished to preserve their prerogative to inflict pain when necessary to prevent a special education student from self-abuse or harm to others. Infliction of pain, they argued, was a last resort in limited situations and should be viewed as instructional treatment rather than as disciplinary punishment. In contrast, some disability advocates argued that disciplining children with disabilities differently from their non-disabled peers was discriminating against an especially vulnerable group of students. The distinction between "instruction" to change behavior and "discipline" to change behavior proved difficult to unravel. Ultimately, the use of pain as a behavioral intervention was preserved in the statute but only on the condition that such intervention comply with a new policy on "Selection of Least Restrictive Behavioral Interventions" which was to be made part of the Utah Special Education Rules. With the understanding that standards for use of aversive interventions would be rules rather than guidelines and that parental input into their development would be honored, key disability advocates withdrew their opposition to the bill.

The standards for "Selection of Least Restrictive Behavioral Interventions" were adopted by the Utah State Board of Education in June 1992 and will be included in the updated version of the Utah Special Education Rules. They detail a process of graduated intervention strategies--from positive to more negative and intrusive strategies, the most aversive of which allow the infliction of physical pain. The less intrusive interventions must be used first. Furthermore, if moderately or highly aversive strategies are used, informed and written parental consent as well as local human rights committee agreement must be obtained unless an emergency dictates otherwise; in which case, the parent must be notified within 24 hours.

Given the provision for parental consent prior to the infliction of physical pain in all but emergency circumstances, it might seem that the behavior reduction intervention exemption was unnecessary in the statute. Educators and many parents, particularly of children with autism, were pleased with it, however, because to them it represented legislative acknowledgment that behavioral interventions did not deserve to be considered corporal punishment under the statute. To them it signified recognition that, given the current state of knowledge, a small number of students with severe disabilities were not responsive to positive interventions and required aversive interventions in limited situations. This assumption continues to be challenged; but for the moment, a working compromise has evolved.

The School Counseling Program

Two changes have occurred in school counseling programs in Utah that will have potential long-term impact on service delivery to elementary and secondary students: 1) the introduction of the Comprehensive Guidance and Counseling Program and 2) the reintroduction of the provisional counseling endorsement.

The Comprehensive Guidance and Counseling Program

The "Comprehensive Guidance and Counseling Program" was introduced through the USOE in 1989. The purpose of this nationally developed model of comprehensive counseling services is to provide school counseling services to 100% of the secondary student population through grade 12. School Counselors are expected to provide: 1) an overall guidance curriculum that consists of structured developmental experiences to promote positive mental health and assist students in acquiring and using life skills to make pro-social choices; 2) an individualized curriculum to help students plan, monitor, and manage their own learning as well as their personal career development; 3) a responsive service delivery system to help meet the immediate needs and concerns of students (e.g., crisis counseling); and 4) an external system of support to supplement and enhance the total guidance program. This support system includes the development of outside community relationships, consultation with advisory councils, and community outreach.

The comprehensive guidance program requires that at least 80% of the counselor's time is spent on providing these direct services. Today over 61 middle/junior high and high schools (20 are in their first year) have implemented this program. New schools will be added each year after their required participation in an orientation/training session conducted by one of the national developers of the program. Existing training institutions, including the University of Utah, are currently utilizing this program as part of the training of school counselors.

The Reintroduction of the Provisional Counseling Endorsement

On May 8, 1992, in response to a perceived need to train more school counselors, the Utah State Board of Education approved a provisional (3-year, nonrenewable) school counseling endorsement. This was a reversal of the Board's 1987 action to eliminate the provisional endorsement. This provisional endorsement extends the school counselor credentialing to four levels, three of which remain certification levels (Basic Certificate, Standard Certificate, Professional Certificate), and all of which require completion of a master's degree. Several educational institutions in Utah have counselor training programs that meet the basic master's degree training requirements for certification or endorsement as a school counselor. These include the University of Utah, Utah State University, BYU, and the University of Phoenix. Together, these institutions are expected to prepare enough school counselors so that a strong possibility exists that within the next five years the provisional endorsement will no longer be needed.

ON THE HORIZON

EXPANDING ROLE FOR PARENTS

The USOE has an appropriation of 223,000 dollars in FY 93 for a new program entitled "Families in Education," co-sponsored by the Utah PTA. The program is coordinated by the Utah Center for Families in Education. The development of the Center in Utah makes Utah the fifth state to commit itself to a strong collaborative partnership between school, family, and community. The Center lists its goals as the following:

- * increase parental and community involvement to improve school and student successes,
- * develop a Student Education Plan (SEP) for all students,
- * design and implement programs that empower parents to assist students and schools in the learning process,
- * create an effective two-way communication system between families and schools,
- * tap the community to provide nontraditional settings for learning to take place,
- * form a business-community alliance with Utah schools, and
- * support family involvement in the schools through appropriate funding sources.

The "Families in Education" program has been initiated at 12 school sites representing elementary, middle, and secondary schools. The goals of the Center are being implemented using a Family Involvement in Education Model developed at John Hopkins University.

Several state-level projects are also underway, one of the most ambitious of which is the 24-hour Family ED-Info Hotline. For those who call in, the Hotline provides 56 different messages in English and Spanish on a variety of topics such as how parents can work with their children at home, parental rights and responsibilities, programs for students with special needs, college and career opportunities, testing procedures, and health and social concerns. The Hotline number in Greater Salt Lake is 531-7007. Outside Salt Lake, the number is 1-800-332-7007. Quarterly newsletters, family involvement packets, bookmarks with instructions on how to read to a child, and calendars are also available for distribution to parents and teachers.

The Center holds promise for strengthening the achievement of Utah school children and is compatible with some of the broader site-based reforms currently under way in the state. Evaluating the success of the Center will be important in the future because appropriation requests are expected to mount. The additional FY 94 appropriation request to fund Center growth is \$90,000.

EXPANDING INTERAGENCY COOPERATION AND COLLABORATION

The USOE will be seeking a FY 94 appropriation from the 1993 Utah Legislature of \$8,000,000 to enable the Utah Departments of Health, Human Services, Education, and the state courts to expand their coordinated services at school sites to students who need them. This budgetary request is the result of the initial encouraging experience under the state-mandated Interagency Council for At-Risk

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Children and Youth. The Utah Legislature established the Council in 1989 and authorized it to contract with local at-risk committees to deliver services focused on the prevention of academic failure and social misbehaviors among students in grades K-3. In some areas, local at-risk committees have collaborated to help students come to school on time, fed and in clean clothes, and have helped their parents receive such services as mental health counseling and employment services. A state-level Task Force for Children and Youth At Risk has been established and is addressing several important issues related to the education and treatment of these children and youth and their families.

The Council seeks authorization and funding to expand their programs through grade 6. Local education agencies apply for funds only after they have established local interagency councils that will collaborate to deliver needed educational, health, mental health, and social services to at-risk students and their families. Two million dollars of the eight million dollar requested appropriation will go to existing programs; the other six will go for program expansion. (See chapter on The Organization and Control of Public Education in Utah Schools for additional information.)

The USOE Students-At-Risk Section is committed to interagency collaboration, and educators are enthused about child-centered and family-centered successes to date and the potential for offering "one-stop shopping" to at-risk students and their families. Evaluation components have yet to be built into the models.

NEED FOR TRAINING AND POLICIES TO IMPLEMENT SECTION 504 OF THE REHABILITATION ACT

Since the passage in 1990 of the Americans with Disabilities Act, with the corresponding visibility it gives to the civil rights of persons with disabilities in both the public and private sector, school districts have become far more aware of the preexisting rights of students with disabilities under Section 504 of the Rehabilitation Act of 1973. Section 504 prohibits discrimination against school-age children with disabilities in all programs receiving federal financial assistance, which includes all the school districts of Utah. In response to the growing interest in Section 504 protections and an anticipated increase in Section 504 disputes, the USOE, in the summer of 1992, suggested to districts that its special education hearing officers could hear disputes under Section 504. Section 504 grievance coordinators/compliance officers should already be in place in each school district to help assure district compliance and attempt to resolve grievances without the need to file for a hearing.

Teachers, administrators, and auxiliary personnel must understand the need to provide adaptations and accommodations in the regular school environment to facilitate the provision of appropriate education and equivalent services to students with disabilities. Students with disabilities protected by Section 504 may or may not require special education programming but nonetheless need to be protected from discrimination in regular education so that they are not denied the equal protection of the laws. Their right extends to equal opportunity to participate in nonacademic and extra-curricular programs, activities, and services. Districts need to have Section 504 policies in place

and to train their staffs to implement them properly. The Utah State Office of Education, Equity Section, is taking a leadership role in helping to assure that this is the case.

INCLUSION MOVEMENT

The USOE Students-At-Risk Section has long been committed to the inclusion of students with disabilities in regular classes and schools to the maximum extent appropriate. This commitment appears to be building and reflects a national trend to integrate students with disabilities in mainstream settings and to close separate schools and separate school districts for students with disabilities. Analogizing to the landmark Supreme Court decision in Brown v. Board of Education of Topeka,¹³⁷ inclusion advocates insist that segregation of students with disabilities into separate schools is unfairly discriminatory, enhances feelings of second-class citizenship among the disabled, and continues a societal tradition of excluding people who are different from the mainstream of community life. Although acknowledging that some children with some kinds of disabilities will continue to require some kinds of services in separate classrooms, advocates insist that necessary services can be delivered efficiently in regular schools. They assert that society will benefit economically in the long run, as students become better prepared for post-school options by interacting with non-disabled peers and as non-disabled peers learn to be more comfortable with persons with disabilities.

Although some school districts along the Wasatch Front continue to operate separate schools for students with disabilities, the USOE is encouraging fuller integration of students with disabilities into mainstream settings. The SARS has two statewide systems change projects under way, one dealing with transition and the other with integration and inclusion. At the moment three models of service delivery co-exist within the state: (1) an inclusion model, especially prevalent in rural school districts where it is difficult to maintain a full continuum of placement options; (2) a continuum-of-placements model, with placements ranging from the regular classroom to separate schools and home/hospital services, which is the traditional IDEA-B model and (3) a parallel systems model, in which parents are given the choice of whether to have their children placed in separate schools or in mainstream schools with special education and needed support services at each building site. Whether true parallel systems can be adequately supported financially is questionable, and whether the momentum will build to close separate schools will be worth watching.

SUMMARY

Forty percent of Utah's school children are targeted for some form of special intervention as students at risk for school failure. Chapter I services for students with economic disadvantages are delivered to approximately seven percent of the school-age population while special education

¹³⁷ 347 U.S. 483 (1954).

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services are delivered to approximately ten percent of the school-age population. Among the other twenty-three percent of students who are considered at risk are pregnant teens, children of migrant workers, substance abusers, homeless children, youth in custody, and students with limited English proficiency. Some of the state's gifted children are also at risk because Utah schools do not meet their needs.

Special education programs for Utah students with disabilities respond to federal and state legal mandates and judicial interpretation of those mandates. They are being guided by a strategic plan entitled the "Utah Agenda" which asserts that broad education reforms must truly reach and serve **all** students including those with disabilities. Among the recent developments in special education are modifications of the state rules, finalization of standards for behavioral interventions, the expansion of services to preschoolers (age 3-5), and early intervention programs for youngsters from birth through two years of age. In the future, because of the growing visibility of Section 504 and the Americans with Disabilities Act, regular education will be asked to assume a greater role in assuring that students with disabilities are not discriminated against in regular and extra-curricular programs. In addition, more schools will feel the pressure to include students with moderate and severe disabilities in regular schools and classrooms with support services as political support for a philosophy of inclusion mounts.

Among the programs intended to benefit other targeted student, at risk or at-risk students in general are the new comprehensive counseling program, a cooperative agreement between the Utah State Board of Substance Abuse and the Utah State Board of Education, programs established by the Utah Center for Families in Education, and the services provided under the auspices of the Interagency Council for At-Risk Children and Youth and its local subsidiaries. Much of the effort of the next several years will be spent in attempting to strengthen interagency collaboration and to involve parents more directly in the education of their children.

CHAPTER FIVE: STATEWIDE EDUCATIONAL ASSESSMENT AND STUDENT PERFORMANCE

Carolyn M. Shields and Patrick F. Galvin

Utah, like many states in the nation, has embarked on a comprehensive program of educational assessment. On a statewide basis, the performance of all students in grades 5, 8, and 11 is assessed using the Stanford Achievement Test. Like many other states, awareness that performance on one test does not provide a complete assessment of student learning has led to the development of criterion referenced assessments aligned with the Utah Core Curriculum. Many other assessment strategies and initiatives, similar to those innovations being discussed and developed in small pilot projects and educational laboratories throughout the country, are also being implemented in Utah. Thus, in terms of assessment, it is probably fair to say that Utah stands firmly in the vanguard of statewide efforts aimed at improving both educational testing and assessment.

EDUCATIONAL ACHIEVEMENT IN UTAH

The state's tradition of emphasis on education can be quickly supported by a number of general statements. In both 1970 and 1976, according to general census information, Utah ranked first among the 50 states in the percentage of its adult population who

HIGHLIGHTS

- * Statewide Testing Program, instituted in 1990, annually tests all students in grades 5, 8, and 11 using the Stanford Achievement Test.
- * Utah ranks near the top among the 50 states in the percentage of adults holding a high school diploma.
- * Over 70% of Utah students taking advanced placement examinations were successful in earning a college level credit.
- * In addition to the Statewide Testing Program, Utah is engaged in other assessment initiatives; for example, the Core Assessment Program (criterion-referenced tests), performance assessments including whole language assessments, portfolios, non-cognitive assessments, and proficiency-based assessments.
- * Educational achievement is reported by the State Office of Education by means of triennial Utah Educational Quality Indicators reports, and additional interim papers.
- * Districts' annual performance reports submitted to the State Board of Education include information concerning student achievement, staff characteristics, curriculum, buildings, student demographic information, fiscal information, assistance to students and families, and support services.
- * Measures of central tendency indicate that the average performance of Utah students on the Stanford Achievement Test increased between 1990 and 1991.
- * The spread of scores on the Stanford Achievement Test narrowed between 1990 and 1991 suggesting that the increases in the average level of achievement are relatively evenly distributed and that one group does not seem to have gained at the expense of any other.
- * The skewness statistic increased between 1990 and 1991 suggesting that achievement for very low scoring schools fell further behind the average in 1991.
- * Changes in scores between 1990 and 1991 may reflect changes in numbers of students taking the Stanford Achievement Test rather than real differences in educational achievement.
- * Meaningful analysis of student achievement requires an examination of data over a period of time.

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held a high school diploma; in the 1980 census, Utah ranked second after Alaska.¹³⁸ In all three census studies, Utah had the highest median years of education of any state in the nation. About 65 - 70% of Utah students take the American College Testing Program (ACT) college entrance exams in any given year. Performance by Utah students taking the ACT in 1991 was higher than that of the national comparison group in English, reading, science reasoning and the composite score, while the performance of Utah students on the mathematics portion of the test was below the national average. However, educators are quick to point out that the percentage of Utah students taking the test is particularly high (68% in 1991); and thus, the group of students taking the test may include students who typically would not elect to attempt it in other states.¹³⁹

In terms of the number of Advanced Placement (AP) examinations taken, on a per capita basis Utah is consistently ranked first among the states with approximately 27% taking at least one AP class. Over 11,500 Advanced Placement examinations were taken by Utah students during the 1991 school year--an increase of over 300% since 1982. Of these, 70.2% received a qualifying score sufficient to earn college credit. According to the USOE, "most Utah students appear to be taking a more rigorous program of studies in 1992 than was true in 1984" when the USOE began to track student course-taking patterns.¹⁴⁰ In addition, of students taking a more rigorous academic program (more English, social studies, science and mathematics), current test scores show a higher aggregate score than they did a decade ago.

Yet, there are frequent reports in the media of a decline in achievement, of illiteracy among high school graduates, and of high drop-out rates, particularly among Black, Hispanic, and American Indian students. What does it all mean? How can we assess the achievement and progress of the approximately 456,000 students in over 769 schools and 40 districts across the state?

OVERVIEW OF CHAPTER

In this chapter, assessment will be discussed from several perspectives. A chronological and historical examination of Utah's assessment and evaluation programs will be followed by an analysis of the data which are available from the statewide testing program implemented in 1990. The statewide initiatives will be discussed in relation to some current trends and directions in assessment. Finally, some issues concerning assessment and evaluation which have significant import for the educational policy community will be raised for reflection and discussion.

138 More recent census data was not readily available for this analysis; there is no reason to believe that the general points have changed significantly with this last census.

139 A Utah Perspective On The National Education Goals. The Office of the Governor, and The Utah State Office of Education.

140 A Utah Perspective On The National Education Goals. The Office of the Governor, and The Utah State Office of Education (p.12).

THREE MAJOR PROGRAMS

Since 1975, Utah has implemented three statewide programs: a statewide assessment program which was instituted in 1975; the Core Assessment Program adopted in 1984 to accompany the Core Curriculum; and a statewide testing program was introduced in 1990 to replace the statewide assessment program.

THE STATEWIDE ASSESSMENT PROGRAM (SAP): 1975 - 1990

Under the terms of the Utah Legislative Code, individual school districts have always enjoyed considerable leeway in determining their specific educational programs. Early in the 1970s a movement began within the state to increase the amount of available information concerning school performance and to ensure some measure of accountability for schools as well as districts. As a result of efforts by a number of groups, including the Utah Legislature, the State Board of Education, and educators throughout the state, the Utah Statewide Assessment Program was born.

Under the direction of David Nelson, then attached to the Planning Unit of the Utah State Office of Education, the program was centered around the only extant set of goals or "maturities" as they were then called. The term is significant, because it provided the foundation for the construction of a number of instruments designed to address specific areas of maturity which had been drawn from the Goals and General Objectives of Education in Utah.¹⁴¹ Goals such as emotional maturity, social maturity, aesthetic maturity provide a general measure of educational attainment and underlie the acquisition of specific knowledge and skills. The assessment program was comprehensive and unique. About 40% of the assessment was devoted to norm-referenced standardized achievement tests (at the time the California Test of Basic Skills--CTBS was used), while the remaining 60% (approximately) was comprised of measures encompassing a breadth of topics related to the maturities as well as to students' attitudes concerning such aspects as their enjoyment of school and peer relations.

Under the statewide assessment program, testing was conducted every three years on students in grades 5 and 11 from a number of schools chosen at random from throughout the state. Data were reported to the school districts by school and described the performance of students from each school sampled as well as the impact of certain demographic factors (ethnicity, gender, and socio-economic status) on student performance. A summary of the findings, Utah Statewide Educational Assessment: General Report,¹⁴² including charts and graphs showing trends over time, was published by the State Office every three years for distribution to interested members of the public.

The Statewide Assessment Program, developed, administered, and scored by the Institute for Behavioral Research and Creativity, Salt Lake City, lasted for 15 years, with its last assessment conducted in the spring of 1990. The program was an outstanding example of a wide scale assessment

141 Utah State Board of Education, 1973

142 Utah Statewide Assessment: General Report, (1990), Utah State Office of Education.

program, in all likelihood unequaled throughout the United States. Nevertheless, because the Statewide Assessment Program used a sampling approach and no experimental controls, it could not be used to compare student performance across districts, nor could it be used for program evaluation.

THE CORE ASSESSMENT PROGRAM (CAP): 1984 - PRESENT

Sections 53A-1-4-2 (1)(b) and (c) of the Utah Code direct the State Board of Education to establish rules and minimum standards for public schools, including such aspects as competency levels, graduation requirements, and curriculum and instruction requirements. In 1984, following this authorization, the State Board of Education mandated a new set of graduation requirements. This led both to higher expectations and to the establishment of a statewide core curriculum. To focus on mastery of specific criteria, rather than the completion of a specified number of hours, "major goals and objectives for virtually every area of the curriculum in grades kindergarten through twelve" were established and communicated to teachers throughout the state.¹⁴³

In order to support the instruction of this core curriculum, the Core Assessment Program (CAP) was instituted. There are two major components to the program: intact end-of-course and end-of-level tests, and test-item pools for teacher assistance. The intact tests are field-tested, criterion-referenced tests specifically linked to the core curriculum. Approximately 36 tests have been developed at elementary school levels in reading, mathematics and science; 38 secondary school level tests are in place for 19 courses in mathematics and science. These tests provide information concerning student attainment of the content of the core curriculum as well as information concerning strengths and weaknesses of the instructional program itself. Although participation in the core assessment program is voluntary, teachers are encouraged to make use of the tests early in May in order to incorporate relevant data into their final instruction and assessment of student performance.

To facilitate and encourage the use of these criterion-referenced tests, the Utah State Office of Education provides an inexpensive scoring service (approx. \$.25 per test) and rapid turn-around time of test results to school districts (7 working days). The core assessment program is increasing in use and popularity: during 1989, about 200,000 tests were administered, while in 1991, over 500,000 were administered throughout the state.

The second aspect of the core assessment program, the test-item pools, are completed or underway in all areas and at all levels of the core curriculum. These multiple choice items, which are completely coded to the core curriculum, assist teachers with less formal, ongoing student assessment.

¹⁴³ Utah's Core Curriculum Assessment Project, (1992), Utah State Office of Education (p.7).

THE STATEWIDE TESTING PROGRAM (STP): 1990 - PRESENT

In 1990, the passage of House Bills 321 and 158,¹⁴⁴ resulted in the adoption of a statewide testing program by the Utah Legislature. The intent of the legislation was to establish measures which would enable the determination of "the effectiveness of school districts and schools in assisting students to master the fundamental educational skills."¹⁴⁵ Thus, the STP introduced a statewide program for the systematic annual assessment of all students in grades 5, 8, and 11, using a norm-referenced achievement test. In addition, the legislation provided for state-wide reporting and the annual development of an educational plan and performance report by each district.

Following an extensive review of available tests, the Stanford Achievement Test (SAT) was chosen for administration in the statewide testing program. This test, generally given in Utah during September and October, generates subtest scores in major subject areas (including mathematics, reading, language/English, science, social science), as well as an overall score. Reports to school districts and schools provide information which is intended primarily to permit schools to identify their own performance trends by comparing present and past performance. In addition, because district and school averages become public information by law, comparisons among schools and districts may serve to increase the public accountability of Utah schools. Thus, the perceived benefits of the Statewide Testing Program include the possibility for inservice on a statewide basis, standardized interpretation of data and, hence, increased trust and reliance on the data itself. This standardized information is perceived to be useful for evaluation of programs as well as for assessment of student achievement.

ADDITIONAL INITIATIVES IN ASSESSMENT

In addition to the three major assessment programs described in the previous section, Utah has been and is currently involved in a number of other initiatives relevant to assessment. The first four of these are associated with alternative assessments of student performance; the other two initiatives, the Utah educational quality indicators program and the district performance reports, comprise a more general assessment or evaluation of school and/or district performance according to a number of indicators.

1. PERFORMANCE ASSESSMENT

Three terms have recently become prominent in respect to educational assessment: alternative assessment, authentic assessment, and performance assessment:

Alternative assessment may be understood to mean any assessment which departs from traditional standardized tests.

144 Utah Code, sections 53A-1-601 to 53A-1-610

145 Utah Code, sections 53A-1-601 to 53A-1-601

Authentic assessment refers to the assessment of students as they perform authentic tasks in appropriate settings (for example, a science experiment during a regularly scheduled laboratory class). It is not intended to suggest that other forms of evaluation are either invalid or, somehow, less authentic.

Performance assessment technically refers to the use of tasks and problems requiring student performance, but conducted during an assessment period. Students may, for example, be required to conduct a science experiment, to construct a model, or to complete a directed writing activity.

The distinctions among these three words, however, are frequently overlooked, and it is quite common to hear all three being used to represent a broader and more student-centered approach to assessment than is possible in either standardized criterion- or norm-referenced tests.

In Utah, a number of school districts have begun to place more emphasis on alternative forms of assessment. In the San Juan School District, for instance, educators have contracted with the Far West Regional Educational Laboratory, to conduct workshops for teachers regarding authentic assessment activities in science.

2. THE WHOLE LANGUAGE ASSESSMENT PACKAGE

Developed under the rubric of the Core Assessment Program (CAP), the whole language assessment package is another example of authentic assessment--in this case assessment which moves away from multiple choice, short answer questions. Although associated with the core assessment program, the broader, more holistic emphasis of a whole language program requires an innovative approach to evaluation. For the past three years, educators from the state have engaged in a joint effort with the Northwest Regional Educational Laboratory to develop a model for writing assessment. The model identifies six dimensions or traits associated with the writing process: ideas, organization, voice, word choice, sentence fluency, and conventions. Districts wishing to become involved in this type of writing assessment are offered a teacher training institute and a series of five handbooks. Writing prompts are provided which are cross-referenced to writing objectives for all grades (K - 12) of the core curriculum. The focus is on the empowerment of both teachers and students as they become better assessors of the writing process. Thus, the whole language assessment package is one example of performance assessment which is beginning to overcome the traditional barriers between instruction and assessment.¹⁴⁶

3. PORTFOLIOS

Related to concerns about finding more appropriate ways to assess student achievement is the use of student portfolios. The form and content of portfolios vary considerably, and agreement concerning

¹⁴⁶ Utah's Major Student Assessment Programs. Utah State Office of Education.

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their use for assessment purposes has not been attained. Nevertheless, the general concept is that students should have the opportunity to select examples of their work to constitute part of the evaluation process or to be used in employment and placement interviews. Frequently, a portfolio includes a compilation of student work, teacher assessments, standardized test information, as well as photographs and descriptions of products and activities which do not lend themselves to written evaluation. In Utah, the Salt Lake School District has been working with the idea of portfolios for several years; the San Juan School District is considering a portfolio as one component of its graduation requirements.

4. PROFICIENCY-BASED CREDIT ASSESSMENT PROJECT

An educational option, frequently known as Proficiency-based Credit Assessment (PBCA), permits students who demonstrate an appropriate level of proficiency to receive credit without actually taking courses.¹⁴⁷ The use of this option in Utah is consistent with the educational initiatives outlined in A Shift in Focus¹⁴⁸ as well as with the graduation requirements established in 1984. To date, 7 school districts in the state have policies concerning PBCA, and 12 others indicated that it is possible for students to attain such standing on a case-by-case basis. The option generates a number of political as well as educational issues which the state has attempted to address by commissioning a study on the national use of such a program. Current assessment procedures for establishing proficiency vary considerably; thus, a statewide initiative in establishing norms and procedures would help to clarify the PBCA situation.

5. UTAH EDUCATIONAL QUALITY INDICATORS PROGRAM

Since 1967, the Utah State Office of Education has published a triennial report entitled Utah Educational Quality Indicators. This report attempts to compile as much relevant data as possible from a variety of sources in order to provide a comprehensive and accurate picture of the condition of education in Utah. This report, then, draws from state and national data, including for example census information relevant to education, to permit an examination of trends in education over time. Some items which have been compiled for these reports include: the American College Testing Program (ACT) information, Scholastic Aptitude Testing, Utah Statewide Educational Assessment program results, advanced placement results (AP), adult educational attainment, as well as national and international information. During the years between the triennial reports, the Utah State Office of Education publishes topical papers to keep the public informed about similar trends and issues; for instance during the 1991-1992 year, four papers were published dealing with the following topics:

147 Proficiency-Based Credit Assessment. (1991). Prepared by the Institute for Behavioral Research in Creativity (IBRIC) for The Utah State Office of Education.

148 A Shift in Focus. (1988). A report by the strategic planning commission. Utah State Office of Education.

ACT performance, course-taking trends of Utah's high school seniors, advanced placement performance, and statewide mathematics performance and programs. These reports have been effective in broadening people's understanding of educational issues in this state.

6. DISTRICT PERFORMANCE REPORTS

House Bill 170, passed by the Legislature in 1990 in conjunction with the legislation mandating the Statewide Testing Program, "requires that Utah school districts submit an annual performance report to the State Board of Education and the Legislature by January 15 of each year."¹⁴⁹ Some districts had already been compiling a district annual 'report card,' while others have been required to develop such a report. House Bill 170 specified the following elements for inclusion in district annual reports: information concerning student achievement, staff characteristics, curriculum, buildings, demographic information concerning its students, fiscal information, assistance to students and families, and support services. This annual report will ensure that relevant information from all districts is compiled in a systematic manner.

EVALUATING THE PERFORMANCE OF UTAH'S SCHOOLS

It is apparent from the foregoing description of assessment procedures in Utah that evaluation is a complex task which makes use of a variety of indicators in order to obtain a more complete picture of educational achievement and progress throughout the state. At present, the most uniform data, over time, are provided by the Statewide Testing Program. Thus, we will next analyze the data available from the STP since its inception in 1990. In so doing, we will make use of several different analytical methods, in order to identify different indicators of school district performance. Considering the multitude of factors affecting school performance, absolute measures of performance (such as median test scores) may be less important than comparisons of performance data over time (trend analysis). In other words, a school with steadily improving but comparatively low scores on the Stanford Achievement Test may be judged performing better than a school with comparatively high but steadily declining SAT scores. Such a perspective on performance data suggests that comparison between schools may be less relevant than the comparison for individual schools over time.

While educators are rightfully concerned about changes in the average (or general) level of achievement (median or mean achievement scores), they should also be concerned about the distribution of those scores within the population. Although all educators are presumably interested in increasing the average level of achievement among students, many are also concerned with narrowing the distribution of scores among schools. If increases in the average level of achievement were made by improving the scores of some students (or schools) at the expense of achievement levels for others,

149 Utah's Major Student Assessment Programs. Utah State Office of Education p.15.

then some educators might argue that such progress was unfair. Without multiple indicators of performance such changes would be difficult to detect, and increases in the average level of achievement would be difficult to interpret. For educators concerned about such a disparity, the spread of achievement scores (standard deviation) provides a measure by which to judge whether there exists a widening achievement gap among schools over time.

The goal of yet other educators may be to promote the achievement of high achieving schools as well as to assist the lower performing schools. If only measures of central tendency (mean, median) and spread (standard deviation) are used to assess performance, school administrators strongly committed to improving the scores of the outstanding or poorly performing schools may find it difficult to assess the impact of their efforts. The skewness statistic is a useful measure relative to this educational objective because of its sensitivity to changes in scores at the ends of the distribution.

These three measures (central tendency, spread, and skewness) provide a framework for judging the performance of Utah's school system over time. Since the implementation of Utah's Statewide Testing Program in 1990, two years of performance data have been collected and made available to the public (the third year of data was collected in the fall of 1992 and has just been released to the public but not in time for inclusion in this document).

Using the analytic framework introduced above, these two years of data, which include scores for Utah's 5th, 8th and 11th grades, were analyzed. The report of these analyses is provided below. Two tables summarize the report. The first compares the performance of all 5th, 8th and 11th grades respectively. The second table shows calculations of performance statistics for each district. Differences in student populations, number of schools, and other factors make it very difficult to compare performance data across districts. When using these tables it is important to keep in mind that the relevant comparison is for individual districts over time.

EDUCATIONAL PERFORMANCE BY GRADE LEVEL

Examination of the raw scores, not the calculated percentile rank scores, reveals that for the 679 5th, 8th and 11th grade classes participating in the Statewide Testing Program the average SAT score increased from 229.8 to 232.0 between 1990 and 1991. This increase may not seem large, but when one considers that it reflects the average score for more than 90,000 students then the significance is more apparent.

Most of the increase in the average level of achievement can be accounted for by the 5th grade students. In fact, the only significant changes in the specific content tests (content areas include math, reading, English, science and social studies) were among the 5th graders. In other words, for the 8th and 11th graders, the differences between the 1990 and 1991 scores in individual content areas were not statistically significant.

The spread of scores, as an indication of changes in the distribution of scores, decreased for all grade levels between 1990 and 1991 school year. In other words, the evidence from this analysis does

not suggest that increases in the average level of achievement are associated with a disproportionate focus on any one segment of the student population. Rather, increases in the average level of achievement appear to be distributed evenly across a wide spectrum of schools within the state.

The skewness statistic increased between 1990 and 1991. This suggests that the scores for the very low scoring schools fell further behind the average scores in 1991. This trend was not true, however, for the high schools (grade 11), where the skewness statistic actually decreased slightly in 1991. Educators concerned about the performance of the very low achieving schools have reason for concern given these data. It is important to note, however, that these data do not describe the magnitude of the effect. Rather, these data provide a framework for judging whether the current trend that leaves the very low scoring schools further behind the average level of achievement will persist and worsen.

As a point of reference, the percentile rank scores were also included in this table. Generally, as one would expect, these scores correspond closely with the raw data both with regard to the median and standard deviation scores.

Table 5.1
Statistics Describing School Performance
For The 5th, 8th and 11th Grades

	<u>All Schools</u>		<u>5th Grade</u>		<u>8th Grade</u>		<u>11th Grade</u>	
	1990 N=678	1991 N=679	1990 N=428	1991 N=429	1990 N=135	1991 N=137	1990 N=115	1991 N=113
Raw Scores:								
Mean	229.8	232.0	259.2	261.5	255.3	255.3	91.0	91.8
Median	255.0	258.0	263.0	266.0	260.0	260.0	93.0	94.0
Spread (Stdev.)	68.5	68.0	29.4	28.1	29.6	28.4	13.3	13.3
Distortion (Skewness)	-1.26	-1.33	-0.65	-1.02	-1.36	-1.61	-1.10	-1.04
Percentile Rank Scores:								
Median	51.0	53	53	54	50	50	48	50
Spread (Stdev.)	14.7	14.2	14.9	14.2	13.9	12.8	14.3	14.5

Evidence provided by uncontrolled indicators of school performance suggest that Utah's schools are performing well. Perhaps some educators primarily concerned with the performance of Utah's exceptional schools would argue that the distribution of scores is not optimal, but such an argument lacks a definitive measure by which to qualify optimal. If, over the years, the skewness variable continues to tail off in a negative direction, then the argument seems better grounded. For the time being, however, the indicators used here to determine the general level of achievement, educational equity, and the effect on exceptional schools suggest a pattern of performance that is adequate, with a couple of qualifiers. First, the achievement of Utah's middle and high school students did not change significantly. Judgments about the overall performance of the schools need to be tempered considering this finding. Second, there is evidence that gains and losses in average Total Test Battery (raw scores) are related to changes in the number of students taking the test. The average number of

student absences for the test increased between 1990 and 1991. One way to illustrate the point is to compare the number of absences between those schools that showed a gain in average SAT scores with those whose average decreased. Of the 331 classes whose scores dropped in 1991-92, compared to their scores in the first year of testing (1990-91), the mean number of student absences was 6.3. For the 342 classes that reported an increase in their scores, the mean number of absences was 8.5. The probability of these differences being due to chance is very slight (0.031). Furthermore, the number of absences was the only variable among the list of socio-economic and test-taking variables that was significantly different from one year to the next. This pattern of results was most obvious in the high schools, where the number of absences for schools increasing their scores was triple that of elementary schools. In other words, the pattern of results appears suspicious, and calls into question whether the increases in test scores, at least in the high schools, were due to instructional interventions or sampling strategies.

COMPARISON OF ACHIEVEMENT FOR DISTRICTS FOR SELECTED EDUCATIONAL OBJECTIVES

In the above discussion, attention has been directed only to state averages. No focus has been given to school district comparisons. In this section, comparison of district achievement relative to selected educational objectives is addressed.

Scores comparing district level achievement were computed by aggregating all the grade level scores (5th, 8th and 11th) within each district. Since the number of grades reporting scores varied from district to district and the tests for each grade level included different numbers of items (especially for the 11th grade), it was necessary to compute Z-scores ($\text{score} - \text{mean} / \text{stdev}$) in order to aggregate the scores for each district. Z scores do not change the relative rank of any particular district, they simply standardize the scores for purposes of comparison.

The standardized scores were then used to rank the districts into centile groups (5 equal groups of 4 districts each). There are several reasons for ranking the districts by centile groups rather than by a simple rank order. The most important is that relatively small differences between district scores are not likely to be significant from a policy point of view. Identifying districts by whether their order was 17th or 18th in a particular range of scores makes fine-grain distinctions that seem unwarranted considering the indicators being used to evaluate the objectives. Centile rankings more clearly distinguish districts by their performance relative to the whole population. Thus, two districts could differ slightly on their measure of achievement for a particular objective and end up in the same centile group. However, comparatively large differences between scores are distinguished by the ranking scheme.

Table 5.2 reports two years of centile rankings for three educational objectives: 1) general level of achievement refers to the median score--or average level of achievement; 2) equalization refers to the spread of scores within a distribution; and, 3) exceptional scores indicates how the very high and low achieving schools are faring relative to the whole group--the skewness statistic. These statistics

are not necessarily significant in and of themselves, but compared over time they do provide information by which one can reasonably judge the "performance" of a school district relative to several educational objectives. Each of these statistics represents a different goal educators may have concern about. One of the points of this table is to highlight that educators pursue many goals simultaneously; the general level of achievement is only one among many of these. Thus, it is conceivable that a district interested primarily in the equalization of scores among its schools may substitute effort aimed at improving the general level of achievement for improving the scores of a subset of schools. The average level of achievement may change little, but the achievement relative to their goals may be significant.

Table 5.2
District Level Performance Indicators

Dist # Sch/ ID#	Dist	Gen Ach			Equalization			Exceptional		
		90	91	Diff	90	91	Diff	90	91	Diff
Alpine	41	1	1	0	2	2	0	4	2	2
Beaver	8	2	2	0	2	2	0	3	1	2
Box Elder	25	2	2	0	3	4	-1	5	3	2
Cache	13	2	2	0	2	2	0	3	3	0
Carbon	11	4	4	0	4	3	1	4	4	0
Daggett	4	5	5	0	4	1	3	2	2	0
Davis	70	3	3	0	5	3	2	5	3	2
Duchesne	14	4	5	-1	3	3	0	4	5	-1
Emery	11	5	5	0	3	2	1	4	3	1
Garfield	11	3	5	-2	5	5	0	1	4	-3
Grand	3	5	5	0	1	1	0	2	1	1
Granite	91	4	3	1	4	5	-1	3	2	1
Iron	12	3	4	-1	1	3	-2	1	4	-3
Jordan	66	3	2	1	3	3	0	4	3	1
Juab	4	5	3	2	3	2	1	4	5	-1
Kane	12	3	4	-1	4	4	0	5	3	2
Millard	6	3	2	1	2	1	1	5	2	3
Morgan	3	2	1	1	3	1	2	5	5	0
Nebo	23	2	1	1	2	2	0	3	1	2
No. Sanpete	7	4	5	-1	4	2	2	1	2	-1
No. Summit	3	1	2	-1	1	1	0	5	5	0
Park City	3	1	1	0	1	1	0	3	4	-1
Piute	4	1	1	0	3	4	-1	1	1	0
Rich	4	1	1	0	5	2	3	1	2	-1
San Juan	16	5	5	0	5	5	0	1	1	0
Sevier	12	4	3	1	1	5	-4	2	5	-3
So. Sanpete	7	2	3	-1	2	1	1	4	3	1
So. Summit	3	2	1	1	1	1	0	1	1	0
Tintic	6	5	3	2	5	5	0	5	4	1
Tooele	20	4	4	0	5	3	2	2	4	-2
Uintah	12	5	4	1	4	5	-1	2	3	-1
Wasatch	6	4	4	0	1	4	-3	3	4	-1
Washington	24	2	3	-1	2	4	-2	4	5	-1
Wayne	4	1	4	-3	4	4	0	2	5	-3
Weber	36	3	3	0	2	3	-1	3	2	1
Salt Lake	38	4	4	0	5	5	0	2	2	0
Ogden	23	5	5	0	3	5	-2	3	1	2
Provo	17	1	2	-1	4	4	0	5	5	0
Logan	8	1	1	0	1	3	-2	1	1	0
Murray	12	3	2	1	5	4	1	2	4	-2

Educational Assessment

Comparisons for a single district, across time, can be very revealing. For example, the general level of achievement within Alpine did not change, given this scale, between 1990 and 1991. However, changes were evident among the district's exceptional schools (referring to the very high and low achieving schools). This table does not specifically detail what has happened, but generally the evidence suggests that the performance of the very low and very high achieving schools has improved in Alpine. More, the distribution of scores within the district did not change, suggesting progress on one goal was not at the expense of another. These additional pieces of information create a much fuller picture of school performance within Alpine, as well as other districts. If educators are only focused on the general level of achievement then their efforts to improve those scores may be at the expense of other important educational goals.

Daggett School District provides a slightly different picture. In this case, the general level of achievement did not significantly change between 1990 and 1991, but the spread of scores within the district was narrowed significantly, from the 4th centile group to the first. More, it seems noteworthy that the achievement level of its exceptional schools did not drop. If the educational goals of this district are directed toward an equalization of scores instead of simply increasing average achievement levels, then one could argue that district performance is meritorious. On the other hand, lack of change in overall level of achievement suggests that focus on equalization of scores may be at the expense of general levels of achievement.

A little more than half of the districts (21 to be exact) changed their general level of achievement ranking between 1990 and 1991: 10 districts lost ground relative to the centile ranking scheme and 11 districts gained on their ranking. One might expect that the districts with the fewest schools would be most susceptible to change, but a correlation between change of rankings and number of schools within the district does not bear out such a hypothesis ($r=0.124$).

These indicators, in and of themselves, do not provide sufficient information by which to judge the performance of schools. However, comparisons of achievement data over time (trend analysis) do provide a useful framework for making such judgments. Because the utility of such a framework depends upon maintenance of records and analysis over time, educators need information on how to keep such records, and on how to make productive use of these concepts and measures. The examination of two years of Utah's Statewide Testing data provides a case study by which to judge the utility of these multiple indicators of performance. The analysis of the data reveals the utility of the statistical indicators as a framework for continued monitoring of school performance within the state. The presentation of these performance measures provides a much broader evaluation framework than is typically provided by most states. The inclusion of these additional analyses makes the presentation more complex, but it also adds more fullness and accuracy to the description of school performance. Interpretation of these data and the performance trends will be more accurate as data accumulate over time.

ISSUES FOR DISCUSSION AND REFLECTION

The foregoing descriptions of the assessment programs and the analysis of the statewide testing data have been provided in an attempt to ensure an awareness and understanding of the assessment initiatives and practices which have been and which are being used in Utah schools. It is clear that the types of assessment programs described earlier in this chapter exhibit a number of strengths and weaknesses. Each one assesses a specific and necessarily limited type of information concerning student progress in a specific and limited way. We have identified assessment initiatives begun on a small scale which are operating in pilot programs throughout the state. Other initiatives, such as the core assessment program, operate on a statewide, but voluntary basis. In addition, we have seen that state assessment programs have served a variety of purposes and addressed a number of different priorities and concerns during the last two decades. Because of the complex nature of educational assessment and testing, there are no simple answers concerning the appropriate choice, use, and interpretation of educational assessment measures. In addition, concerns about the relationships between testing and curriculum, and testing and learning persist. The next section will address some of these important issues.

EDUCATIONAL ASSESSMENT AND ACCOUNTABILITY

Recent national discussion about declining achievement scores, increased costs, and the need for greater accountability in education has brought measurement and testing to the fore. In 1991, the National Council on Education Standards and Testing called for the establishment of a national system of standards and assessments as part of a comprehensive reform strategy for America's schools. Underlying this call was the assumption that testing could act as a powerful influence on school improvement. Congressional testimony by such scholars as Daniel Koretz, George Madaus, Edward Haertell and Albert Beaton challenged the premise that such "high stakes tests" would promote higher levels of achievement. Among the many interests of these noted scholars was a concern that such tests would have a narrowing effect on instruction that would lead to inflated test scores which would overstate the "real" level of learning students achieve. Moreover, these scholars argued that such tests may "... have pernicious effects on instruction, such as substitution of cramming for teaching."¹⁵⁰

Substantial research would support their position that standardized tests do not promote student learning and that, in some instances, standardized tests may dictate or restrict what is taught. In addition, evidence indicates that if results from standardized achievement tests are improperly used, students who are already at risk may be adversely affected, for example, by inappropriate labeling, and by inequitable decisions concerning resource allocation or student placement in specific programs.

150 Koretz, D. M., Linn, R. L., Dunbar, S. B. & Shepard, L. A. (1991) The effects of high stakes testing on achievement: Preliminary findings about generalization across tests. A paper presented at the Annual meeting of the Educational Research Association, Chicago.

The point is that using accountability tests, such as Utah's Statewide Testing Program, holds potentially negative incentives that can produce undesirable outcomes. Where educators are held accountable for the average level of achievement, there is an incentive to distribute resources (teachers, instructional time, and strategies) in such a way as to exacerbate achievement differences between groups of students or schools within the state. This is a fundamental equity concern, expressed in the work of Koretz, Madaus, Haertel and Beaton,¹⁵¹ and underscores the need for the use of the multiple analyses of performance presented in this chapter.

EDUCATIONAL ASSESSMENT AND EDUCATIONAL GOALS

Education encompasses such a variety of complex goals and purposes that any evaluation of school performance requires many different measures. The assumption that a single test or measure of performance could adequately assess all of the desired content, skills, behaviors, and attitudes is clearly erroneous. Thus, the goal of an evaluation system ought not to be to find one perfect measure by which all educational goals can be judged, but rather to develop multiple ways of assessing performance. Any assessment system which overemphasizes results of one type of test may indeed be in danger of narrowing or distorting the educational program offered by the schools.

Current initiatives towards more child-centered, open classrooms, toward teachers-as-facilitators and students as self-directed learners, are caught in an ever widening gap between desired flexibility and diversity of learnings for students at any given age or stage and the increasing move towards accountability and testing.¹⁵² has found that what is not tested is sifted out of most curricula; teachers report that testing does result in changes in the curriculum and an emphasis on tested skills. This in turn may lead to a stifling of teacher creativity and student initiative.

Zessoules and Gardner have found that "a testing culture promotes the notion of a teacher-centered classroom, an assessment culture promotes the notion of a student-centered classroom."¹⁵³ In a student-centered classroom, evaluation helps to promote learning as students analyze their mistakes and learn from them. Typical norm-referenced, standardized tests are not used as a basis for error analysis or subsequent student learning; neither has performance on such "high-stakes" tests been found to generalize to other situations.¹⁵⁴

151 Koretz, D. M., Madaus, G. F., Haertel, E., & Beaton, A. E. (1992). National educational standards and testing: A response to the recommendations of the National Council on Education Standards and Testing. Congressional Testimony, Rand: Institute on Education and Training.

152 Haney, W. (1991). We must take care: Fitting assessments to functions. In V. Perrone (Ed.), Expanding Student Assessment. Alexandria, VA: ASCD p.149.

153 Zessoules, R., & Gardner, H. (1991). Authentic assessment: Beyond the buzzword and into the classroom. In V. Perrone (Ed.), Expanding Student Assessment. Alexandria, VA: ASCD p.65.

154 Haney, W. (1991). We must take care: Fitting assessments to functions. In V. Perrone (Ed.), Expanding Student Assessment. Alexandria, VA: ASCD p. 151.

One analysis of two widely used norm-referenced tests found that thinking skills are not being tested. Specifically, in a study conducted at the Mid-continent Regional Educational Laboratory, very little relationship was found between the number and type of cognitive operations required by an item and the difficulty of that item.¹⁵⁵ Further, for one of the tests, it was determined that 97.5% of student performance deals with lower-level factual information and test-taking skills and that only 9 out of the 22 important cognitive skills analyzed were covered by the test.¹⁵⁶ (Other researchers identify up to 60 thinking skills, most of which were not investigated in this study.) It is also important to recognize that most norm-referenced, standardized tests require students to answer "pre-answered questions"--questions which require only recognition of a correct answer rather than production. Thus, it is clear that an undue emphasis on the type of activity demanded by standardized achievement tests could distort the goal of empowering students to become self-directed and life-long learners. It is essential for policy makers to recognize the limitations and potential dangers of standardized achievement tests and to use them with care. Such limitations do not, however, render them invalid or useless. It is important to know whether progress is being made, and in what areas. Likewise, it is relevant to know in what areas growth in learning does not appear to be taking place. Sometimes, however, it seems that fundamental and critical questions become lost in the concern to raise test scores, or to compare one group of students with another.

We are also intrigued by the problems and possibilities which an expanded view of assessment might offer. Zessoules and Gardner suggest that for an assessment culture (as opposed to a testing culture) to exist in a classroom, four conditions are necessary: nurturing complex understandings, developing reflective habits of mind, documenting students' evolving understandings, and making use of assessment as a moment of learning.¹⁵⁷ Viewed in this way assessment may become not simply an instrument for reporting numbers and statistics, but a powerful instrument of teaching and learning.

THE USE OF DATA IN EDUCATIONAL ASSESSMENT

We have identified the need for cautious interpretation of educational assessment data. A single statistical interpretation may give an erroneous impression of improvement or decline in student achievement; multiple analyses and indicators provide a more complete picture. In addition, wide-scale assessment procedures which make use of similar instruments for all students, may contain inherent biases against children from ethnic and cultural minorities. It is important, then, for wide-scale assessment indicators to be interpreted in such a way as to eliminate negative effects on the future educational or life opportunities for individual students.

155 Marzano, R.J. (1990, May). Standardized Tests: Do They Measure Cognitive Abilities? *NASSP Bulletin*, 93-101.

156 Marzano, R.J. (1990, May). Standardized Tests: Do They Measure Cognitive Abilities? *NASSP Bulletin*, 93-101.

157 Zessoules, R., & Gardner, H. (1991). Authentic assessment: Beyond the buzzword and into the classroom. In V. Perrone (Ed.), *Expanding Student Assessment*. Alexandria, VA: ASCD

Statewide assessment offers comparability which cannot be accomplished in any other way. If such comparability results in increased standardization which reduces cultural diversity, high academic achievement, and individual creativity, then it is to be discouraged. If such comparability results in inappropriate decisions concerning individual student placement, curriculum, or text books, or if individual student confidentiality is not respected, it is to be rejected. If, on the other hand, comparability results in higher standards and higher expectations of achievement for all students, it may be praised.

It is important to identify the purpose of any educational assessment and to ensure that the data are used consistent with the declared purpose. For instance, data accumulated for the purposes of comparing the performance of one school district to another may not be appropriate for making decisions about school programs or individual student placement. In addition, it is important that the collection of data serve a real purpose. Accumulation of data and writing of reports are not to be construed as ends in themselves; a plan for the subsequent dissemination and use of the data to improve education is also required. Thus, it is important that data be carefully and appropriately used for educational rather than for political purposes.

Excellence refers less to conformity or uniformity of performance than to universal attainment of a high quality of educational performance. Statewide assessment should facilitate statewide comparisons which will themselves lead to policies to enhance such high standards. Thus, state-wide assessment data should provide a starting point for recognizing districts which seem to be providing students with high quality learning experiences and those which are not. The data constitute a foundation upon which further questions must be asked--questions concerning the underlying conditions, expectations, norms, and procedures which are associated with the perceived discrepancies.

ON THE HORIZON

Several current trends pose immediate questions for Utah policy makers. Among these, accountability and testing, and the locus of control are of special concern.

ACCOUNTABILITY AND TESTING

Within the current strong trend toward more accountability and more testing, there exists debate about what type of assessment strategies should be used. For example, the intent of standardized norm-referenced tests is in sharp contrast to proposals for authentic testing and portfolios; in practice, however, the distinctions are already becoming blurred. Underlying these different testing methods are fundamentally different beliefs about the purposes of testing and the standards by which education ought to be held accountable. On the one hand standardized tests provide a bench mark against which students, schools, districts, and states can be compared. If one accepts that education serves broad

social goals, as well as individual needs, then it seems reasonable to argue that education should be held accountable to norm-referenced standards of achievement. Education also provides for the individual, but standardized tests say little about the contextual environment in which a student performs. Further, standardized tests requiring students to select from answers provided, rather than to solve problems or to produce their own answers, assess only a small portion of the goals and purposes of education. Authentic assessment may reflect an accountability scheme more directly attentive to the individual learner.

Considering the eclectic history of testing legislation in Utah, it is perhaps not surprising that both standardized achievement tests and authentic testing strategies are simultaneously being pursued. One might argue, given the very different purposes of these assessment strategies reliance on one or another would not be in the best interest of education. Such an argument may be a good justification for pursuing multiple lines of assessment, but it ignores a point that deserves attention: assessment strategies are not neutral interventions but rather have a direct impact on curriculum, teaching strategies, and student classroom activities. The choice of an assessment policy does affect the operations of schools such that the results of the education process cannot be uncoupled from the process itself. Achievement results are difficult to interpret without information about how those results are produced, what teachers do in classrooms, what instructional materials are used, and how lessons are delivered. Indeed, what is tested is frequently what is taught.

Some advocates of standardized testing argue that considering the abysmal performance of schools in the past, holding them accountable to the basics is progress. However, one of the underlying concerns in this chapter was the possibility that use of standardized tests would result in a narrow definition of achievement and performance that would ignore important social and educational goals. Further, it was argued that heavy reliance on measures of the general level of achievement could result in certain groups of students being unfairly treated, as educators (held accountable to higher average levels of achievement) pursue such a goal. Recognizing the potential implications associated with assessment policies also provides a framework for thinking about how two or more assessment policies may create conflicting incentives, and thus weaken the influence of both strategies.

THE LOCUS OF CONTROL

The second issue has to do with the locus of control over assessment policies. Currently, there exist simultaneous proposals for nationalizing curriculum (strong centralized control) and for giving the local school authority for such decisions (site-based management). The America 2000 strategy calls for new national tests by 1993 and an addendum to the America 2000 report states that

American Achievement Tests will examine the results of education. They have nothing to say about how those results are produced, what teachers do in class from

one day to the next, what instructional materials are chosen, what lesson plans are followed.

The breadth of such proposals places states in a peculiar middle position of being held accountable to nationally prescribed goals and of having provided schools autonomy over how these goals are pursued. Meanwhile, pressures to ensure more local control over curriculum -- a teacher's professional prerogative -- place states, which are legally responsible for the provision of an adequate education, in an unusual position. These tensions are evident in concerns about the extent to which national goals accurately correspond to Utah's goals and educational priorities.

CONCLUDING COMMENTS

This chapter is intended to provide information about the current state of assessment throughout Utah. In addition, it is hoped that the issues raised will provoke reflection, debate, and serious examination of the implications of educational policies relevant to assessment of student achievement. The description of the statewide assessment initiatives and the analysis of data acquired since 1990 from the Statewide Testing Program demonstrate the complexity and the importance of the topic. There is no doubt that educators and educational institutions have a difficult and challenging task. All members of the public, as well as legislators and governors in particular, have the right, indeed, the duty, to require accountability. Yet questions persist. Does a rigorous testing program ensure accountability? Does the use of standardized tests ensure that such problems as cultural bias, effects of socio-economic status, quality of teacher preparation and teaching are adequately controlled? If standardized tests are adjusted or reported in such a way as to eliminate knowledge of factors which might reduce the scores of individual schools or school districts, does it indeed lead to a kind of complacency in which we no longer have to worry about the lack of achievement of some of our most disadvantaged, or some of our best students?

Holding teachers and schools accountable to outcome measures carries some potential for improving school performance. But assessment policies that fail to recognize the number of goals and concerns to which educators must respond may confound school improvement plans. Inclusion of numerous performance indicators provides an accountability framework for educators that recognizes multiple purposes, including equity (greater equalization of achievement scores) and excellence (increasing average levels of achievement). Future decisions concerning the choice of appropriate assessment instruments and strategies, adequate interpretation of assessment results, and effective use of the data will need to take into account the complexity of educational needs and priorities and the changing nature of the education system itself.

GLOSSARY

Advanced Placement (AP) indicates that students have completed a course which qualifies for college level credit.

Alternative Assessment refers to assessment which requires students to actively respond to test items rather than to choose among proposed answers (sometimes used as a synonym for authentic assessment or performance assessment).

American College Testing Program (ACT) refers to a national achievement test commonly used as an indicator of readiness for college.

Assessment is used as a broader and less precise term than evaluation, but indicates a determination of student achievement in a specified area.

Authentic Assessment is frequently used as a synonym for alternative assessment or performance assessment to indicate a form of assessment in which students are asked to perform a meaningful task or respond to an open ended "authentic" question.

Centile Group refers to a percentile rank distribution ranked into five groups with the same number of cases

Central Tendency refers to an index of central location employed in the description of frequencies distributions.

Core Assessment Program (CAP) refers to a program of tests and test items which have been developed to assist teachers to assess student progress relevant to the Core Curriculum introduced in 1984.

Core Curriculum refers to statewide curriculum guidelines which were mandated for all subjects at all grade levels in 1984; the Utah Core Curriculum was implemented in 1987.

Criterion-Referenced Assessment refers to a test which is intended to measure achievement against specific criteria (such as objectives of a core curriculum).

Equity is commonly used as a synonym for fairness or equality of educational treatment.

High Stakes Testing has been used to refer to testing which is associated with such "high stakes" as increased or decreased funding, granting of teacher tenure, etc.

Mainstreaming is the term used for placing the majority of students in the "mainstream" educational environment, rather than separating students by physical or intellectual ability into tracks, groups, or special classes.

Maturities is a term used by the Utah State Office of Education during the mid 1970s to identify such areas of student achievement not assessed by traditional norm-referenced tests. e.g., social, emotional, and aesthetic maturity.

Mean Score refers to the sum of scores or values of a variable divided by their number.

Median Score in a distribution of scores is that score that divides the distribution into two equal halves.

Educational Assessment

Negative Skewed Distribution (Tail) is a distribution with relatively fewer frequencies at the lower end of the horizontal axis.

Norm-Referenced Tests are tests in which student achievement is compared to a "norm" group (generally a nationally representative sample). Thus, test items are thought to represent the "normal" or average curriculum rather than a specific state or school program.

Percentile Rank is a number that represents the percent of cases in a comparison group that achieves scores equal to or lower than the one cited.

Performance Assessment is used synonymously with authentic and alternative assessment to identify assessment in which students are asked to "perform", e.g., complete a writing assignment, perform a science experiment, solve a problem.

Portfolio has become associated with authentic assessment to refer to assessment which examines an accumulation of student achievement indicators, chosen by either student or teachers to represent student progress.

Positively Skewed Distribution (Tail) a distribution with relatively fewer frequencies at the higher end of the horizontal axis.

Proficiency-Based Credit Assessment (PBCA) requires students to demonstrate proficiency in a given area without having completed a formal credit course offered within a school or district e.g., music or art proficiency.

Random Sampling a subset of a population or universe selected in such a way that each member of the population has an equal opportunity to be selected.

Rank Order is an array of scores arranged according to their magnitude from the smallest to the largest.

Skewness refers to a distribution that departs from symmetry and tails off at one end.

Standard Deviation (Spread) is a measure of dispersion, defined as the square root of the sum of the squared deviations from the mean divided by

Standardized Test (as opposed to teacher made tests) identifies tests which have been "standardized" to permit appropriate comparisons of student achievement either against specified criteria or with a specific norm.

Statewide Testing Program (STP) identifies the current mandatory program of annual student assessment using the Stanford achievement test which was implemented in Utah in 1990.

Statewide Assessment Program (SAP) identified the Utah program of student assessment which assessed student performance based on a random sample of students at three year intervals between 1975 and 1990.

Test Item Pool is a "pool" of test items which has been developed by experts for teachers to use either as practice or test items in conjunction with the Core Curriculum Program.

Utah Educational Quality Indicators is the title of a report published triannually which makes use of data from a number of sources in order to examine the current state of education in Utah.

Z-Score is a score that represents the deviation of a specific score from the mean and is expressed in standard deviation units.

CHAPTER SIX: EDUCATION PERSONNEL ISSUES AND INITIATIVES IN UTAH

By Diana G. Pounder and Ann Weaver Hart

During the past decade, educational reform in the nation and in Utah has received considerable attention from the public, from legislators and policy makers, and from educators themselves. In Utah, a number of state and local issues and initiatives have had and continue to have implications for education personnel in the state. These issues could generally be classified into one of three major categories: teacher work design, salary and working conditions, and educator accountability. Many of these issues and initiatives affect considerably the day-to-day work of teachers and other educators. Thus, they influence Utah's ability to attract, retain, motivate, and develop a strong pool of competent educators.

This chapter begins with background demographics of education personnel in Utah. It then highlights some of the major state issues and initiatives that have influenced education personnel in the past decade. The implications of these developments for Utah education personnel are then discussed. Lastly, the chapter identifies some of the personnel-related issues that may have implications for future policy developments in Utah.

During the past decade, educational reform in the nation and in Utah has received considerable attention from the public, from legislators and policy makers, and from educators themselves. In Utah, a number of state and local issues and initiatives have had and continue to have implications for education personnel in the state. These issues could generally be classified into one of three major categories: teacher work design, salary and working conditions, and educator accountability. Many of these issues and initiatives affect considerably the day-to-day work of teachers and other educators. Thus, they influence Utah's ability to attract, retain, motivate, and develop a strong pool of competent educators.

HIGHLIGHTS

* During the past decade of educational reform in Utah, state initiatives affecting educators include: changes in teacher work design; efforts to improve educator salaries and working conditions; and greater provisions for educator accountability.

* Utah's public schools employ more than 20,000 professional personnel:

- 65% of professional educators are female, yet males dominate the ranks of school administrators;

- median age of Utah's professional educators is 42.7 and the median years of experience is 10-12 years;

- 44% of Utah's teacher preparation graduates enter teaching positions in the state of Utah;

- approximately 5% of Utah's teachers are working under a temporary "letter of authorization" due to a shortage of certified teachers in some specialization areas.

* Utah's career ladder program has resulted in an average per teacher salary base increase of over \$1800 statewide, yet recent national rankings of 38-40 suggest that Utah's teachers are among the lowest paid in the country.

* Utah has had the highest average class size in the country for over a decade, in part due to student enrollment increases of over 100,000 students from 1980 to 1990 and of almost 25,000 students from 1988 to 1991.

* Utah has one of the most administratively efficient systems in the country. Its staff/administrator ratios as well as its student/administrator ratios are among the highest in the country, ranking from 34th to 48th nationally.

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EDUCATION PERSONNEL DEMOGRAPHICS¹⁵⁸

NUMBER OF PROFESSIONAL PERSONNEL

The public schools of Utah reported for the 1990-91 school year, 20,523 professional personnel contracted to 40 school districts and assigned to 40 administrative offices, 445 elementary schools, 35 middle schools, 80 junior high schools, 100 high schools, 53 special education schools and 18 alternative high schools and vocational schools. Fifty-one percent of the total professional personnel are employed in Davis and Salt Lake counties. See Table 6.1 for a distribution by position and instructional level.

Table 6.1
Professional Education Personnel in Utah

Position	Elementary	Middle	Secondary	District	Total
Teacher	9,918	1,654	6,634		18,206
Principal	405	81	315		801
Other (includes media, counselors, etc.)	126	86	428		640
District Instructional				409	409
Supervisors/Directors				367	367
Other (specialists, social workers, psych., etc.)				29	29
Assistant Supt./Admin. Assts.				31	31
Superintendents				40	40
Total	10,449	1,821	7,377	876	20,523

Source: Status of Teacher Personnel in Utah, 1990-91, USOE, 1991

SEX AND AGE DISTRIBUTION OF PROFESSIONAL PERSONNEL

Among Utah's professional education personnel, women outnumber men by almost two to one although the distribution across positions and instructional levels varies substantially (See Table 6.2). Women represent 65.75% of all professional personnel; whereas, men represent 34.25% of all professional personnel. However, women tend to dominate the teaching positions; whereas, men tend to dominate the administrative positions. The median age for all professional personnel is 42.7; and although the median age varies slightly by sex, position, and instructional level, the variation is only slight.

EXPERIENCE AND TRAINING OF PROFESSIONAL PERSONNEL

The median years of experience for elementary and middle school teachers is 10 years; whereas, the median years of experience for secondary teachers is 12 years. Of the total professional personnel, approximately 37% have a bachelor's degree, 32% have between 30 - 60 hours beyond a bachelor's degree, 29% have a master's degree or a master's plus 45 hours, and 2% have a doctoral degree.

¹⁵⁸ Portions of this section on Demographics were excerpted, with permission, from Status of Teacher Personnel in Utah - 1990-91, Utah State Office of Education, 1991

Table 6.2
Male/Female Percentage Distribution By Position
(Percent Rounded To Nearest Whole Number)

Position	Elementary		Middle		Secondary		District	
	%M	%F	%M	%F	%M	%F	%M	%F
Teacher	14%	86%	44%	56%	54%	46%		
Principal	68%	32%	83%	17%	85%	15%		
Other	17%	83%	42%	58%	53%	47%		
District Instructional Supervisors/Directors							33%	67%
Other (e.g., specialists, social workers, psych.)							55%	45%
Asst. Supt./Admin. Asst.							31%	69%
Superintendents							84%	16%
							98%	2%

Source: Status of Teacher Personnel in Utah, 1990-91. USOE.

STAFF TURNOVER

Turnover for the state as a whole is computed by subtracting the increased number of teachers from the total number of new professional personnel employed. Personnel leaving the public system in Utah includes those who accept assignments outside of the state or in private schools or higher institutions of learning within the state or who retire, die, take maternity leave for one or more years, or who change occupations. The turnover rate for 1989 was 10.99% while for 1990 it was 6.69%.

SUPPLY OF NEW GRADUATES

The supply of teachers is measured by the number of candidates who are graduated from the state's six teacher preparation institutions. The estimated number of candidates recommended for certification in 1989-90 was 1,754--72 for Early Childhood Education, 775 for Elementary, 668 for Secondary, and 239 for "Ungraded."

Forty-four percent (770) of the 1990 graduating class accepted teaching positions in Utah in the fall of 1990. Fifteen percent accepted teaching positions outside the state. The balance assumed non-teaching roles.

LETTERS OF AUTHORIZATION

"Letters of Authorization" is a term used to describe the authority given to school districts to employ individuals without proper certification. These letters are issued to school districts upon proof of dire need and for one year only. The number of "Letters of Authorization" issued in 1991 was 885, which represents 4.3% of the total professional personnel; proper certification credentials are held by 95.7% of the total professional personnel. Of the total letters of authorization, 61% were issued for secondary teaching positions--primarily for teachers employed only one or two periods per day outside their certification area; 23% were issued for special education positions; 8% were issued for elementary teaching positions; 6% for counselor, media, and psychologist positions; and 2% were issued for administrative positions.

TEACHER WORK DESIGN

CAREER LADDER PROGRAM AND YEAR-ROUND SCHOOLS

In an attempt to improve teaching and learning and, subsequently, student performance, Utah has enacted changes in the work and reward structures available to teachers. The career ladder program was proposed as one way to make teachers more proficient, to reward and retain the best teachers, and to attract an increased share of academically able students to teaching careers. Some proponents contended that the career ladder also would provide a more systematic evaluation system and, therefore, a way to get rid of poor teachers.

The Utah Career Ladder legislation was passed in 1984 during a time when as many as 40 states were investigating some form of teacher career ladder and when eight of out ten Americans said they favored some form of increased pay for particularly capable teachers. The Career Ladder Act allows each district to plan a career ladder for teachers and provides funds to support the career ladder. While a variety of beliefs and assumptions about the teacher work, salary, and benefits reforms drove the original legislation, Utah's career ladder program eventually contained three components. First, salary increases accrue to all teachers as compensation for additional contract days. Second, career ladder plans may (and during some of the ensuing period were required to) include merit pay or performance bonuses based on classroom teaching performance. Finally, staff differentiation in the form of additional tasks, job enlargement, or job redesign is included. In 1990-91, the total appropriation for the career ladder was \$34,836,200 or 23,380 weighted pupil units ¹⁵⁹ This money, when distributed to teachers, yielded an average per teacher salary base increase of \$1,845 state wide.

Utah's State Public Education Strategic Plan (1992) further reinforces the state's concern for changes in teachers' work, compensation, and incentives. One of the major goals of the plan is to:

energize our system of public education by attracting and retaining educators from among our best and brightest citizens through an aggressive plan to elevate its stature as a profession and compensate in a competitive way. (p. 19)

Within this goal, planners argue that Utah should provide vertical and horizontal professional growth opportunities for teachers, funding to districts for professional development, differentiated staffing, increased compensation, extended or partnership contracts for teachers, greater teacher involvement in decision-making, multi-faceted evaluation models, and new selection criteria for educators that predict future performance in the profession.

Independent researchers and the Utah State Office of Education (USOE) have sought to assess the attraction, retention, reward, and performance effects of the career ladder. USOE assessment included a survey of a stratified random sample of teachers in 1985 and then subsequent follow-up

¹⁵⁹ SB 212, 1992-93

surveys in 1990 and 1991. Teachers' attitudes toward the impact of the career ladder program were gathered in ten areas. The 1990 and 1991 surveys revealed that teachers were slightly more positive about the educational impacts of the career ladder program than in 1985.

Teachers judged the impact of the career ladder program on the structure and attractiveness of the teaching profession favorably. Over 74% in 1991 argued that their district's ladder was at least somewhat effective in providing a multiple-level compensation system; 56% felt that it encouraged teachers to remain in the classroom, and 60% felt it would do so if it remained in effect for the next five years, 65% said the career ladder enabled them to improve the quality of instruction in their classrooms. The contribution of the ladder to a full year of employment for teachers received less support; less than 50% felt that this had occurred.

No formal assessment of the impact of career ladder on student achievement has been attempted in Utah.¹⁶⁰ Only teacher perception data are available from the USOE studies; however, over two-thirds of teacher respondents believe that the career ladder has improved the quality of instruction and has had a positive impact on the instructional climate in their schools.

The most popular component of the career ladder from its inception has been the extended contract days. Teachers use the majority of this time planning for classroom instruction and accomplishing critical clerical functions such as student grades. They are less likely to participate in professional development activities and unlikely to use the time for additional interaction with parents.

The number of teachers believing that career ladders facilitate the recognition and reward of outstanding teaching to at least a minimal degree has grown since the first state survey in 1985, ranging from 60% to almost 80%. These data may be skewed, however, because over two thirds of teachers participated in the career ladder--54% in job enlargement; 68% in performance bonuses; 64% in ladder levels; and 89% in extended contract days in 1991-92. Over two thirds of teachers received bonuses for "outstanding teaching" (68% in 1990-91) and were promoted to ladder levels. In fact, when the extended days component is excluded, the highest level of inclusion in the Utah ladder is the bonus for outstanding teaching (68%).

Teachers believe that the ladder contribute to teachers' professional growth (57% at least moderately in 1991-92). A modest majority also support the contention that they offer opportunities for increased responsibility and compensation to teachers who wish to stay in the classroom. They also believe that teacher evaluation has been improved in their districts as part of the career ladder initiatives of the past decade. However, in the 1990-91 survey, the most commonly offered response to the question "What one change would you suggest that would most improve the career ladder

¹⁶⁰ Data from Missouri suggest that student variables found to affect achievement such as alienation, liking for school, and engagement can be positively linked to career ladder schools (Ebmeier & Hart, 1992).

program in your district?" was "improve teacher evaluation" by discontinuing advance notice of visits and by eliminating the "jumping through hoops" that characterizes so many rigid systems.

By more than five to one, teachers responding to the USOE 1990-91 career ladder survey felt that the career ladder should be continued. Teachers most likely to be supportive of the ladder were elementary teachers, female, less experienced (1-10 years), and teachers in urban or suburban areas. These results support the contention that the ladder is contributing to the retention of teachers in these groups.

The initial teacher work reform movement, of which the career ladder was part, targeted the best and brightest teachers. No specific data have been collected in Utah about the relative appeal of various configurations of the career ladder on the "best and brightest" teachers. Some features related to many career ladders have been studied, however, and lead to conclusions that the components of the ladder that provide professional growth opportunities, differentiated rewards, and additional opportunities for extended and differentiated teacher contracts actually appeal to teachers whose principals assess their performance as superior and who were themselves top performers in college.¹⁶¹ They also are more likely to resign, however.

A few general conclusions can be drawn from studies in Utah about the teachers' responses to work design reforms. First, the best and brightest teachers and potential teachers, the targets of reform, respond differently to conditions of work and available rewards than do average or poor teachers. They are more committed to serving students than are less able teachers. But they are more disillusioned when they feel they have failed to influence a child's learning. They hold career expectations that include growth, achievement, and increasing opportunities for influence and authority over time. They leave the profession in higher proportions than their less able peers, and fewer of them say they expect to return to teaching.

Second, the best and brightest teachers have different work and career expectations than do other teachers. They are unconcerned about being observed but are disdainful of canned observation instruments and short, infrequent visits as a means for assessing the full impact of a teacher's work. The best and brightest new teachers constantly explore careers outside of education. They remain unconvinced that the system will differentiate fairly and consistently among the best and poorest teachers. They are less committed to the uniform salary schedule than are their less able peers.

Third, teachers value authority, influence, and participation in decision making. They desire more participation in professional decisions in all areas, during all phases, and at all levels.

161 Hart, A. W. (1992). Work Feature Values of Tomorrow's Teachers: Work Redesign as an Incentive and School Improvement Policy. Paper presented at the annual meeting of the American Educational Research Association, April, San Francisco, CA.; Murphy, M. J., Hart, A. W., & Walters, L. C. (1989). Satisfaction and Intent to Leave Responses of New Teachers to Redesign Teacher Work. A paper presented at the annual meeting of the American Educational Research Association, San Francisco.; Hart, A. W. & Murphy, M. J. (1990). New Teachers React to Redesigned Teacher Work. American Journal of Education, 98, 224-250

Fourth, the best and brightest want new work and incentive designs to be tied to teaching and learning in schools. Carefully constructed work redesign for teachers can result in more effective school organizations

The press of high student enrollments leading to year-round schools in Utah also has provided work and compensation alternatives for teachers in Utah. In the USOE surveys of teachers' attitudes about the career ladder, responses to open-ended questions about what changes should be made included a number of calls for more opportunities for Year-Round employment. With no change in the fundamental tasks, authority, and advancement opportunities of teachers, Year-Round schools are offering a new chance for teachers to expand their earning and work potential, an unintended benefit of an enrollment crisis. When career ladder opportunities for job enlargement, ladder placement, expanded work as mentors or instructional and curricular leaders are included with site-based management and Year-Round school teaching contracts, teaching becomes a much less static and homogenous career. Teachers earn substantially more than many administrators in schools, and the incentive goals of the reforms are met.

SITE-BASED DECISION MAKING

Many components of Utah's strategic plan for education call for various elements of site-based decision making. Strategy three praises teacher involvement in decision making. Strategy four says "We will empower each school to create its own vision and plan to achieve results consistent with the mission and objectives of Utah Public Education" (p. 21). Strategy ten places an emphasis at the local school level for research and development. Additionally, block grants, the nine district consortium, the Manti coalition for high school leadership, and other initiatives in the state support a fundamental commitment to the school site as the most appropriate level for critical education decisions.

Studies of career and work values of the most promising Utah teachers reveal a strong commitment to teacher authority and participation in professional decisions by the best teachers. These findings support the belief expressed in the strategic planning process that site-based decision making has a future in Utah. Decision-making processes and their impacts on the distribution of authority are a critical aspect of work redesign.¹⁶²

Research over many decades reveals that blanket participation plans often dissatisfy excellent teachers as much as they satisfy some teachers.¹⁶³ Often, superior teachers exhibit a "zone of indifference" over issues outside their central professional concerns; yet no tradition of increased power and authority **within** their zone of professional concerns has developed in the design of

162 Hart, A. W. (1990). Impacts of the School Social Unit on Teacher Authority during Work Redesign. *American Educational Research Journal*, 27 (3)

163 Bacharach, S.B., Bamberger, P., Conley, S.C., & Bauer, S. (1990). The Dimensionality of Decision Participation in Educational Organizations: The Value of a Multi-Domain Evaluative Approach. *Educational Administration Quarterly*, 26, 126-167.

participatory school governance systems.¹⁶⁴ Thus differentiation among teachers' professional domains of concern during participatory or site-based decision making is crucial to the success of reforms.

One comprehensive and recent study of the teachers in 82 schools in five Utah districts provides important evidence of major professional areas in which Utah teachers would like to have more say in decision making.¹⁶⁵ It also provides insight into the formats for participation valued by Utah teachers and the phases during which they would like participation.

Sorensen's comprehensive study surveyed teachers about the content areas in which they have input in decisions, the level of involvement in decision making they experience, and the level of decision making involvement they desire. This study found that teachers experience a discrepancy between their perceived participation and desired participation. The teachers said they felt deprived of adequate participation in all the major areas of professional concern--strategy and operations of the organization, personal planning, and instructional operations. Teachers wanted more input on resource allocation and in the development of organizational goals.

This strong evidence reveals that teachers in Utah do not view their roles as narrowly as they may have in the past. Teachers want more input into the evaluation of teacher performance, student discipline policies, standardized testing policies, grading, and reporting to parents. Teachers want more involvement in decisions at all phases--from the time decision opportunities first arise to the final and direct decision making.¹⁶⁶ There may be real utility and appeal in direct, informal, and voluntary participation patterns for teachers on personal (career and classroom) issues and direct, more formal, and voluntary participation on school/organizational issues.

SALARY AND WORKING CONDITIONS

EDUCATOR COMPENSATION

Utah's teacher salaries, among the lowest in the United States, are a continual source of concern for Utah's policy makers and educators alike. Because the overwhelming majority of Utah teachers have taken advantage of career ladder incentives, the average teacher's salary has been boosted by approximately \$2000 per year. However, in spite of this additional source of compensation, Utah's

164 Kunz, D. & Hoy, W. (1976). Leader Behavior of Principals and the Professional Zone of Acceptance of Teachers. *Educational Administration Quarterly*, 12, 49-64.

165 Sorensen, N. B. (1991). *Participative Decision Making in Public Schools: The Effects of Structural and Process Properties on Decision Equilibrium in Four Decision Content Domains*. Unpublished dissertation, Department of Educational Administration, University of Utah.

166 Site-based decision making and participation can vary dramatically. Teachers can, for example, get involved at varying stages: 1) not be informed that decisions even are being made; 2) be informed that decisions are being made; 3) give their opinions about the decision; 4) believe their opinions are taken into account but not participate directly in the final decision; or 5) give approval, vote, or veto a decision (Sorensen, 1991). They also can identify problems that need decisions; determine guidelines for making decisions; gather facts and opinion; suggest choices and alternatives; express preferences (Imber & Duke, 1984).

average teacher salary has lagged further and further behind national averages, particularly since 1987. (See Table 6.3.)

Table 6.3
Utah vs. National Average Teacher Salary Comparisons

Year	Utah w/out Career Ladder \$\$\$	Utah with Career Ladder \$\$\$	Nation	Ranking (including Career Ladder \$\$\$)	Difference	
					Dollars	% age
82-83	\$19,859	NA	\$20,695	26	-\$ 836	- 4.0%
83-84	20,007	NA	21,935	29	-1928	- 8.8%
84-85	21,170	\$22,062	23,600	26	-1538	- 6.5%
85-86	22,553	24,245	25,199	26	- 954	- 3.8%
86-87	22,956	24,795	26,565	27	-1770	- 6.7%
87-88	22,555	24,474	28,023	36	-3558	-12.7%
88-89	22,852	24,814	29,566	40	-4752	-16.1%
89-90	23,686	25,531	31,361	39	-5830	-18.6%
90-91	25,578	27,423	33,041	38	-5618	-17.0%
91-92*	26,524	28,369	34,413	N/A	-6044	-17.56%
92-93*	27,691	29,617	35,867	N/A	-6250	-17.42%

*estimated data

Source: UEA Research Division, March 1992

The reader is reminded that teacher salary (even with career ladder supplements) does not represent the complete compensation package. Additional pecuniary benefits, such as health insurance and retirement, typically represent an additional one-third of an employee's direct pay. For instance, in 1990-91, the teacher contract salary average was \$25,578; and the teacher career ladder supplement average was \$1,845. In addition to this direct pay, the average dollar amount of teacher contract benefits was \$8,780; and the career ladder benefits average was \$386. Thus, the total compensation package average, including career ladder monies, was \$36,589. How Utah's total compensation average compares to other states is unclear. However, due to the rising costs of many fringe benefits, policy makers are increasingly aware of and cautious regarding the "hidden" costs associated with teacher salary increases.

In addition to classroom teacher salaries, the Utah State Office of Education reports average salaries of other certified educators. (See Table 6.4.) These data suggest that Utah school administrators make, on average, 58% more than do instructional personnel. This ratio is approximately the same as that of national administrator/teacher salary ratios.¹⁶⁷

167 Educational Research Service (1992). *School Administration Under Attack: What Are the Facts?* in ERS: Concerns in Education. Arlington, VA: ERS

Table 6.4
1991-92 Average Contract Salary For Certified Personnel

Position	Contract Salary
Teachers (including Special Education)	\$26,180
Other Instructional (e.g., Librarian, Counselor, Psychologist, Social Worker, etc.)	29,894
Total Instructional	27,189
Principals	43,945
Administrative	42,884
Total Certified Personnel	27,535

Source: Utah State Office of Education, Finance & Statistics Division, 1992

The difference in average administrator salary and average teacher salary is generally attributable to several factors: differences in responsibilities, length of contract year, level of education and training, and years of educational experience. National data suggest that differences in administrator and teacher salaries are less today than they were over a decade ago. Further, the widespread implementation of Utah's career ladder plan as well as extended contract and Year-Round school options can result in salary compression problems for some school districts. That is, higher paid teachers can earn as much if not more than lower paid administrators. Although salary compression can serve as a disincentive for those who aspire to administrative positions, it nevertheless illustrates that Utah's efforts to boost teacher salary through supplemental pay incentives may allow school districts to hold some of its "best and brightest" in the classroom rather than losing them to the administrative ranks.

In sum, in spite of recent and varied efforts to increase the compensation levels of Utah's educators, the state continues to lag behind that of most other states. Although comparisons between Utah and other states on total educator compensation and supplemental pay incentives are difficult, it is safe to assert that the demand for increased state allocations to educator pay will not subside over the next few years.

CLASS SIZE AND PUPIL/TEACHER RATIO

A policy study conducted in the 1980s comprehensively addressed Utah's class size issue.¹⁶⁸ The author's observations are no less true today than yesterday: "Class size is an important issue for Utah's school teachers and a perennial topic of debate for Utah's lawmakers. Given the current size of Utah's public school classes, the predicted enrollment growth, and the cost of even a moderate uniform reduction in the pupil-teacher ratio, the class size issue is a troublesome policy problem" (p. iii).

¹⁶⁸ Geary, S. (1988). Class size: Issues and Implications for Policymaking in Utah. An Occasional Policy Paper Sponsored by the FOCUS Project. Salt Lake City, UT: Graduate School of Education, University of Utah.

Personnel Issues

Concern for this issue has influenced the state legislature to make appropriations for class size reduction initially targeting the lower elementary grades.¹⁶⁹ What is the result of these recent appropriations? What is the anticipated effect on Utah's teachers and students? These questions are addressed below.

Estimates of pupil-teacher ratios can vary, depending on the measurement technique used.¹⁷⁰ However, regardless of the measurement technique used, Utah's average class size continues to be the highest in the country. As reported by Geary, pupil-teacher ratios for the 1986-87 school year were estimated at 23.60 to 24.64, depending on the reporting agency and measurement technique used. During that same academic year, the U.S. Department of Education statistics indicated that the national class size average was 17.9, with a range from 14.0 (Connecticut) to 23.6 (Utah).

Class size data for the past few years suggest that Utah's high class size pattern has not changed. During the past decade, Utah's average class size has remained as large as ever; and in fact, increased enrollment trends may have mitigated against class size reduction efforts. Further, because the national class size average has declined over the past decade, the disparity between Utah and the national average has become larger. (See Table 6.5.)

Table 6.5
Utah V. National Pupil/Teacher Ratio Comparisons

Year	Utah	Nat'l Avg.	Difference (raw no. & percentage)	
1980	23.14	18.89	4.25	22.50%
1981	23.68	18.71	4.97	26.56%
1982	24.68	18.59	6.09	32.76%
1983	24.37	18.59	5.78	31.09%
1984	24.10	18.38	5.72	31.12%
1985	24.12	18.09	6.03	33.33%
1986	23.61	17.87	5.74	32.12%
1987	25.50	17.68	7.82	44.23%
1988	25.75	17.53	8.22	46.89%
1989	25.52	17.30	8.22	47.51%
1990	25.53	17.14	8.39	48.95%
1991	24.80	17.30	7.50	43.35%

Source: NEA Ranking of the States Publication, October 1992

However, because these figures reflect aggregated data across all grade levels and state school districts, they do not capture the class size reduction area targeted by recent Utah legislative appropriations--the early elementary grades. The data shown below (see Table 6.6) suggest that class sizes in the early grades are being reduced at steady, yet marginal, increments. The reduction effort must also be considered in view of Utah's steadily increasing student enrollment. In particular, Utah's

169 Utah Code Ann. Sect. 53A-17a-124.5 [1992]

170 Geary, S. (1988). *Class size: Issues and Implications for Policymaking in Utah*. An Occasional Policy Paper Sponsored by the FOCUS Project. Salt Lake City, UT: Graduate School of Education, University of Utah.

student enrollment has increased by over 100,000 students between 1980 and 1990 with an enrollment increase from 1988 to 1991 of almost 25,000 students.

Table 6.6
K-3 Pupil/Teacher Ratio For Fall Enrollment 1989-1991
(Student Average Daily Membership/Teacher Full Time Equivalent Ratio)

Year	K	1st	2nd	3rd	K-3	4-6	K-6	K-12	Total ADM
1988	(data not available)						26.94	25.79	426,225
1989	24.94	24.94	26.33	27.48	26.22	29.38	27.11	25.96	432,169
1990	24.64	24.62	25.79	26.97	25.78	29.02	26.51	25.79	441,354
1991	24.50	22.95	25.29	26.45	24.83	28.59	25.91	25.16	450,758

Source: Utah State Office of Education, Finance & Statistics Division, 1992

As suggested by Geary's summary of the research on class size, initiatives to reduce class size typically have noticeable positive effects on student achievement only if significant reductions (class sizes below 15 or at least below 20) are made--especially in the primary grades and for at-risk and minority students.¹⁷¹ Moderate reductions (class sizes in the 20-35 range) have only marginal effects on student achievement but generally improve teacher morale and student attitudes. Thus, although recent efforts to reduce class size in the early elementary grades may be statistically noticeable, it is doubtful that teachers or students will feel these effects in the classroom. Further, at the current rate of class size reduction, it will be years before teachers or students will feel the effects of appreciably smaller classes.

Because the cost of making significant uniform class size reductions is staggering and because moderate reductions would have little effect on student achievement, it seems appropriate that alternatives to uniform class size reduction be targeted by the legislature and school policy makers. These alternatives may be designed to target the particular students and core content areas that would most benefit from reduced class sizes. Alternatives such as extra staffing for high need areas, the increased and selective use of paraprofessionals and volunteers, team teaching, class recomposition plans, and others may be among the most viable options for Utah to address its high class size issue. Although each of these options has its particular set of advantages and disadvantages, these alternatives should be fully utilized where reasonable until such time as significant class size reduction

171 Geary, S. (1988). Class size: Issues and Implications for Policymaking in Utah. An Occasional Policy Paper Sponsored by the FOCUS Project. Salt Lake City, UT: Graduate School of Education, University of Utah.

may occur. (See Geary for a thorough discussion of alternative strategies and their associated costs and benefits).

EDUCATOR ACCOUNTABILITY

EDUCATOR EVALUATION

In 1987, the Utah Legislature passed the Educator Evaluation Act,¹⁷² an act designed to provide "systematic, fair, and competent evaluation of public educators and remediation of those whose performance is inadequate." Three prior legislative acts also have implications for educator evaluation in Utah --the Utah Orderly School Termination Procedures Act,¹⁷³ the Educational Professional Practices Act,¹⁷⁴ and the Teacher Career Ladders Act.¹⁷⁵

The major provisions of the Educator Evaluation Act are to specify the requirements for systematic supervision, evaluation, and remediation of educators "to promote the professional growth of the teacher, to identify and encourage teacher behaviors which contribute to student progress, and . . . to improve the education system." The Utah Orderly Termination Procedures Act speaks primarily to the due process rights of teachers who may be terminated for cause. The Educational Professional Practices Act establishes a Professional Practices Commission which recommends standards for professional and ethical conduct as well as establishing procedures for acting on charges of immoral, unprofessional, or unethical conduct by educators. The Career Ladder Act (discussed earlier) is essentially a job enlargement, extended contract, and performance bonus provision. However, it contains some provisions "for frequent, comprehensive evaluation of teachers with less than three years' teaching experience, and periodic evaluations of other teachers."

Although each of these acts has a primary purpose or intent independent of the others, there is clearly some overlap in their purposes and provisions--as well as a lack of consistency in the definition of terms across acts. These overlapping purposes and provisions and inconsistent terminology may present ambiguity and implementation dilemmas for school districts seeking to adopt evaluation policies and procedures consistent with these acts and also consistent with purposes of personnel evaluation. The net effect is that local district evaluation policies and procedures may become unduly complicated and may lack parsimony and practicability within the parameters of the human resource system.

In addressing this issue, a recent policy report concludes with two major recommendations to policy-makers:¹⁷⁶

1. Incorporate critical elements and primary purposes of the four evaluation-related acts into an omnibus educator evaluation act to reduce the ambiguity, overlap, and potential contradictions currently created by terminology and provisions of the current four separate acts.

For instance, the omnibus act could include:

- a) a provision for formative evaluation and staff development (similar to some aspects of the existing Educator Evaluation Act);
- b) a provision for summative evaluation or employment retention/termination decisions including due process provisions (similar to some aspects of the Educator Evaluation Act and primary aspects of the Orderly Termination Act);
- c) a provision for rewarding performance (similar to primary aspects of the Career Ladder Act);
- d) a provision for revocation of licensure (a primary aspect of the Educational Professional Practices Act).

Most importantly, this omnibus act should have clear and consistent use of terms and make provisions for the full array of personnel functions and decisions that represent the various purposes for educator evaluation.

2. The degree of specificity in a newly created omnibus act should be somewhat less than currently dictated by similar acts. In particular, the specific methods, time-frames, etc. that are appropriate for each major type of evaluation should be determined by a joint committee of teachers and administrators at the local district level. The omnibus legislation should provide the basic purposes and broad legal principles that must be implemented. The local districts should be granted the discretion to adopt implementation policies and practices that fit local district needs and yet adhere to broad legal principles of fairness, accuracy, effectiveness, and practicability.

It is this last recommendation that may be most important in creating a fair and effective, yet practical educator evaluation system for Utah's schools. Because teachers, administrators, and school boards have a stake in educator evaluation and because increasingly schools are relying on site-based decision-making models to gain consensus for and commitment to school policies and procedures, educator evaluation systems may be most effectively developed by joint committees of teachers, administrators, and board members at the local district level. Further, the process of collaborative problem-solving itself may help reduce some of the "us-them" tension that often undergirds evaluation policy conflicts between teacher unions and school administrator and school board organizations:

176 Sperry, D.J., Pounder, D.G., & Drew, C.J. (1992). *Educator Evaluation and the Law: Confusion in Purpose*. Policy Studies in Education Series. Salt Lake City, UT: Utah Education Policy Center, Graduate School of Education, University of Utah.

EDUCATOR MISCONDUCT OR UNPROFESSIONAL BEHAVIOR

Increased attention to educator misconduct or unprofessional behavior has resulted in a 50% increase in the number of complaints filed with the Utah Professional Practices Commission against certified educators between 1990-1991 and 1991-1992.¹⁷⁷ Most of these complaints involve either sexual impropriety or drug abuse.

Concern for these problems coupled with demands for accountability by public officials and the public's right to information has resulted in several Utah laws regarding the handling of personnel records and information in schools. For instance, a 1992 amendment to the Educational Professional Practices Act states:¹⁷⁸

- (2) (a) In fulfilling its duty under Subsection (1)(c), the commission [Professional Practices Commission] shall investigate any allegation of sexual abuse of a student or a minor by an educator whether or not the educator has surrendered his certificate without a hearing.
- (b) The investigation shall be independent of and separate from any criminal investigation.
- (c) The commission may receive any evidence related to the allegation of sexual abuse, except records sealed and expunged pursuant to a court order under Section 77-18-2.

Another recent Utah legislative act regarding the expungement and sealing of records limits the rights of child sex offenders and others to have records expunged.¹⁷⁹ Clearly, legislative acts and policies such as these send a signal to the educational community that careful attention must be given to recording personnel information that has strong implications for students' protection and welfare. Further, school boards and administrators must become increasingly cautious in researching the background of prospective employees. Because poorly conducted background checks of applicants could have grave consequences for student welfare and safety, school districts are being held to a higher degree of accountability in their hiring practices. To address this problem, the National Association of State Department of Teacher Education and Certification (NASDTEC) has established a clearinghouse to share information about educators who have been prosecuted or lost their professional credential due to child sex abuse or other types of misconduct.

177 Utah State Office of Education, Professional Practices Commission, 1992

178 Section 53A-7-110

179 Utah Code Ann. Sect. 77-18-2, 1992

Another recent Utah statute, the Government Records Access and Management Act (GRAMA)¹⁸⁰, addresses the need to balance the public's right to information against an individual's constitutional right to privacy. The act emphasizes that appropriate classification of records as "public," "private," "controlled," "protected," or "limited" is essential to understanding under what conditions and to whom public information can be released. This act has strong implications for many records kept by school districts, including personnel records. Because appropriate release (or non-release) of records is too complex to be pursued in depth in this document, the reader is referred to the Utah Attorney General's Office document entitled Handbook for the Utah Government Records Access and Management Act (1992). However, again, educators and school boards must be increasingly knowledgeable as well as cautious in keeping and managing school and personnel-related records to protect the welfare of school children.

IMPLICATIONS FOR ATTRACTION, RETENTION, MOTIVATION, & DEVELOPMENT OF EDUCATORS

The preceding discussion of Utah's current personnel practices holds implications for future decisions related to attraction, retention, motivation, and professional development for educators. Future state revenues place considerable constraints on the options that can be followed. This section discusses realistic options that empirical research and current data suggest will have the most potential for success. It also discusses implications for future research and data gathering to assess the success of these policies and practices.

First, career ladders and Year-Round schools appear to be providing unanticipated opportunities for redesigning schools, classrooms, and teaching careers. The state should focus on the features of teachers' work valued by the best teachers and potential teachers that also provide a professional resource for instruction and curriculum development. The attraction and retention potential of these structures needs much more careful development and study. Redesign might extend beyond work redesign to organizational redesign as schools seek broader and more varied ways to achieve goals. These changes can be implemented in concert with other attempts to alter educator compensation opportunities and should include meaningful participation in the decision making process at multiple stages and levels of intensity of organizational as well as instructional decisions. More systematic attempts to link various reforms and compensation packages to the recruitment and retention goals expressed by policy makers and legislators and to varied measures of student performance should be pursued. Surveys of beliefs that these reforms affect instruction are appropriate, but they are insufficient evidence of effects over time.

Second, districts and schools should design site-based plans that do not simply transfer authoritarian power from the district administration to the school administration. The state should involve teachers in planning site-based systems that include strategy and the operations of the school,

¹⁸⁰ Utah Code Ann. Chapt. 63-2, 1992

Personnel Issues

personal career planning and work structure options, instruction, resource allocation, and the development of legitimately unique school goals that are not simply rephrased versions of district or state goals developed at higher levels of the system and passed down to teachers. Parents, teachers, and students each will have more flexibility within these newly designed schools even as the state protects its legitimate interest in quality of outcomes and adherence to general principles.

Third, compensation packages that draw on these new configurations of students and adult professionals in schools to provide more choices appear to hold promise. The state can use structures forced by circumstances of high enrollment such as year round schools to offer teachers additional earning and authority opportunities. One school, one principal, one teacher per classroom for nine months is a model which may become increasingly rare. Extended contracts, career ladder, and other options that appeal to teachers who want to maintain their career focus on teaching should be developed and offered; and their impacts on the best teachers should be traced.

Fourth, it seems unlikely that Utah can afford to reduce class sizes substantially and quickly across grade levels. If the state focuses on alternative designs of teaching and more varied use of paraprofessionals and other adults in the teaching process, outcomes could be more quickly affected. The traditional classroom with one teacher and fewer students seems to hold less potential and may even be less effective in improving student outcomes given the innovations that become increasingly available (including well-designed technology systems). At the same time, student outcome data carefully and systematically collected will be years away. Teacher morale and student attitudes also are positive outcomes and should not be ignored as evidence of success.

Fifth, educator evaluation procedures should reinforce these reforms and new structures for work and compensation rather than suppress them. These systems should be judged on three criteria: 1) maximum flexibility for districts to develop processes based on general principles of professionalism and fairness, 2) the due process rights of the educator, and 3) students' rights to a good education. The current situation is unduly complex and leads to overlap and unclear expectations. Neither educators' rights nor professional needs can be met under these conditions. The law should make evaluation expectations consistent yet reduce ambiguity, overlap, and potential contradictions. When different standards and processes are used for different purposes (career ladders, termination, "regular" evaluation) it implies that the state and profession do not know what they want from educators. The legislature should abandon the micro-management approach of administration by legislation and focus on broad general principles and purposes. Evaluation then will be more likely to be fair, accurate, effective, and practical.

Finally, increased concern over educator misconduct demands that personnel records be kept in an increasingly complex environment. Educators must continue to balance an individual's right to privacy with the system's legitimate interest in protecting school children from educators who have problems with sexual abuse or other types of misconduct or unprofessional behavior.

FUTURE PERSONNEL-RELATED POLICY ISSUES

ADMINISTRATIVE STAFF REDUCTION

Administrator "downsizing" in education is a personnel issue recently raised in the state. It has been suggested that if the number of school administrators were reduced, these salary savings could be better utilized for direct instructional expenses (e.g., teachers' salaries). However, comparisons of Utah administrator/teacher and administrator/student ratios suggest that Utah schools are among the most administratively efficient systems in the country. (See Table 6.7.)

Table 6.7
Utah vs. National Administrative Staff Ratio Comparisons
1989-90

	Utah	Nation	Rank
Classroom teachers per school district staff member	22.3	11.4	34
Classroom teachers per school building administrator	21.7	18.4	37
Students enrolled per school district staff member	555.1	195.8	43
Students enrolled per school building administrator	540.1	315.9	48
Teachers as a percent of total public school staff	56.2	53.3	NA
Students enrolled per total public school staff	14.0	9.2	NA

Source: Utah State Office of Education. School Finance and Statistics. 1992

Further, analysis of the state maintenance and operation fund suggests that only a small percentage of school expenditures goes to administrative functions (including professional and nonprofessional staff salaries, benefits, and non-salary costs). See Table 6.8.

Table 6.8
Utah Public School Districts
Summary Of Final Current Expenditures For 1990-91

Maintenance and Operation Fund	Dollars	Share
A. Instruction (Teachers)	\$809,650,337	69.14%
B. Student Support Services	30,360,032	2.59%
C. Instructional Support Staff	48,495,080	4.14%
D. District Administration	12,072,288	1.03%
E. School Administration	72,092,833	6.16%
F. Business	9,807,624	0.84%
G. Maintenance	123,726,422	10.57%
H. Transportation	32,752,271	2.80%
I. Central & Data Processing	8,794,202	0.75%
J. Other Support Services	263,837	0.02%
K. Dept. Service Short-Term Interest	2,869,001	0.24%
Total Salaries, M & O Fund	749,194,251	63.98%
Total Benefits, M & O Fund	247,652,272	21.15%
Total non-salary Costs, M & O Fund	<u>154,037,424</u>	<u>13.15%</u>
Total M & O Fund	\$1,150,883,947	98.28%

Source: Utah State Office of Education. Finance & Statistics Division, 1992

Personnel Issues

A recent study by the Educational Research Service provides a detailed analysis of the administrator downsizing issue.¹⁸¹ Their research, based on national data, concludes that:

- 1) Local school districts are major enterprises performing important public functions with substantially fewer management personnel than found in business and industry. (For instance, the ratio of employee to executive or administrator in public schools is 14.5 whereas the same ratio for public administration is 3.6.)
- 2) The number of school administrators has not been growing rapidly; the ratio of district central-office staff to classroom teachers has remained constant for more than a decade.
- 3) Many additional responsibilities have been assigned to school districts in recent years.
- 4) Administrator salaries have not been gaining at the expense of teacher salaries, which are generally considered to be low.
- 5) Differences between teacher salaries and those of superintendents, assistant superintendents, and principals are less today than they were over a decade ago; and current differences are relatively narrow.
- 6) The share of school budgets going to administration has not increased at the expense of instruction and has been relatively stable.
- 7) In the typical school district's budget there is little money presently going to administration that could be realistically reallocated to improve other functions or programs.
- 8) Good school management is essential for the development and operation of effective schools; assertive instructional leadership by the school principal is the key element found common to effective schools. School district administrative and professional staff are important to support, augment, and coordinate effective and efficient school programs.

In sum, it would appear that the savings to the state by reducing school and district administrative staff would be negligible in terms of overall cost-benefit to education. Further, the burden put on teachers and others in schools may outweigh any financial benefit gained in administrative staff reduction.

OTHER FUTURE ISSUES

Some policy makers have proposed that Utah fully implement the state's Public Education Strategic Plan. However, analysts of the plan have estimated that full implementation would cost approximately \$500 million dollars. At the same time there appears to be little support for new or additional state taxes to meet budgetary needs. Clearly, there is a conflict; that is, either the strategic plan cannot be fully implemented, or new tax monies must be levied. It is uncertain how this tension

181 Educational Research Service (1992). School Administration Under Attack: What Are the Facts? in ERS: Concerns in Education, Arlington, VA: ERS.

will be resolved, but it is certain to be an important policy issue for the education community and the state. Portions of the state strategic plan have particularly strong implications for education personnel in Utah--specifically sections addressing strategies for attracting and retaining the "best and brightest" in the education profession and also strategies for differentiation of staffing in education.

Another possible important education issue in Utah's future is that of "choice." Choice suggests that parents may have wide discretion in the choice of school or educational program their child may attend--including possible private school options. Although some communities or states have begun exploring or implementing choice plans, Utah's policy makers have not fully addressed the need or implications of choice plans for Utah's education system. If choice plans were available to Utah citizenry, there may be many implications for school personnel--including greater emphasis on recruitment, selection, and development of teachers, principals, and other education personnel to increase the "market appeal" of specific school sites.

CLOSING COMMENTS

Utah, like many states, has initiated many reform policies during the past decade that continue to impact Utah's school personnel. These initiatives have generally fallen into one of three categories: changes in teacher work design; efforts to improve educators' salaries and working conditions; and increased attention to educator accountability. By and large, these efforts have been designed to attract, retain, motivate, and develop Utah's educators to achieve improved results for Utah's education system and its students. These and future education personnel efforts will be reported in future issues of this publication.

CHAPTER SEVEN: PUBLIC SCHOOL FINANCE

By Patrick F. Galvin

This chapter examines Utah's financing of public schools. The chapter begins by discussing in detail the structure of Utah's finance plan. This introduction is intended as a reference for individuals interested in the theoretical and financial details of Utah's public school finance plan. This introduction will serve as a reference for future publications about school finance issues in Utah. The second half of the chapter addresses topical issues, such as a analysis of the tax burden in Utah compared to other state.

Utah's school finance plan is described by Debra Verstegen¹⁸² as a two-tiered system, composed of Utah's Foundation Plan and Minimum School Program. Utah is somewhat unique in the use of these finance strategies, combined in a way that led John Augenblick (a national expert on issues of school finance) to conclude that Utah operates with a high degree of fiscal equity.¹⁸³ The equalizing effects of these components of Utah's school finance plan are described in this chapter.

The chapter serves several purposes and is divided accordingly. It begins with a discussion of fiscal capacity, a term that describes a district's capacity to raise revenues in support of its educational need (need is often described too simplistically as the number of students within a district). The focus

HIGHLIGHTS

- * Spending on public education (K-12), including capital outlay and debt service, is more than 1.5 billion dollars.
- * Support for public schools is the largest single line item on the governor's budget: approximately 40% of the total budget.
- * Utah's finance plan does significantly reduce the fiscal inequities among districts, compared to those that would exist if public education were paid for exclusively by the property tax.
- * With all tax revenues included, the revenues available to high spending districts is about twice that of the low spending districts, in contrast to some states where the ratio is 1 to 4 or more.
- * In 1989 the Utah Legislature funded Utah's School Finance Task Force. Many of the recommendations of that committee have been put into law. (These are identified and discussed in the text.)
- * Utah has the highest percentage of school-age children of any state in the country: 26.7%.
- * Utah's tax load on personal income is high compared to national averages, but property taxes are close to the national average.
- * Three issues, the Robin Hood Act (equalization of capital outlay), the fee waiver issue, and land trust management, are identified as being potentially significant and interesting issues affecting the finance of public education in Utah in the near future.

182 Education at a Glance: 1990

183 Utah's School Finance Task Force Report, 1990.

of this initial discussion is on the disparities among Utah's 40 districts. The second section of the paper describes efforts to reduce the fiscal disparities among Utah's school districts: the Foundation Plan is a way of ensuring that funds raised by local property taxes are equalized; the Minimum School Plan incorporates the foundation plan into a more complete equalization effort relative to each district's need. The third section of the paper describes the source of revenues used to supplement and equalize those raised by taxes on property.

The laws governing the finance of Utah's public schools are constantly changing; the fourth section describes recent changes in some of these laws. The paper concludes with a more speculative discussion about school choice and school finance issues. In total, this chapter should provide educators and other interested parties with necessary background and current information to understand school finance issues in Utah.

FISCAL CAPACITY: SOURCES OF FISCAL INEQUITY

At the turn of the century, and until the 1950s, schools were financed largely by revenues raised from local property taxes. In the last 40 years, state governments have assumed an increasingly large portion of the responsibility for financing public education.¹⁸⁴ In Utah, as is the case nationally, state government provides more than 50% of the funds necessary to support public education. One of the primary reasons for such support is to promote fiscal equity among the state's 40 districts.

Differences in the value of property are one source of fiscal inequities among Utah's school districts. In this context, property refers to buildings and land; assessment is the assignment of value to this property. Differences in the cumulative assessed value of property among districts in Utah are great. For example, the total assessed property valuation of Granite School District is \$7,707,790,174, while the assessed valuation of Tintic School District is just \$25,077,174. (These data are from the 1991-92 School Year, more recent data is available from the Utah State Office of Education, but this data was not immediately available at the time of writing this and other chapters in this publication.) Consequently, the capacity of these districts to raise public school monies, committing a percentage of this property tax base to public education, varies dramatically. To illustrate, if each district levied a tax of one mill (0.001) against its tax base, the differences would be significant: Granite could raise \$7,707,790 while Tintic could only raise \$25,077 per mill.

Fiscal capacity is not defined solely in terms of a district's ability to raise revenues. Fiscal capacity also refers to the ability of a district to raise revenues relative to its need. Granite, while operating with a huge property tax base, has a very large student population (79,366); its need for resources is very great. Tintic, with its comparatively small property tax base, only serves 239 students. The fiscal capacity of Granite can be compared to Tintic's by dividing each district's ability

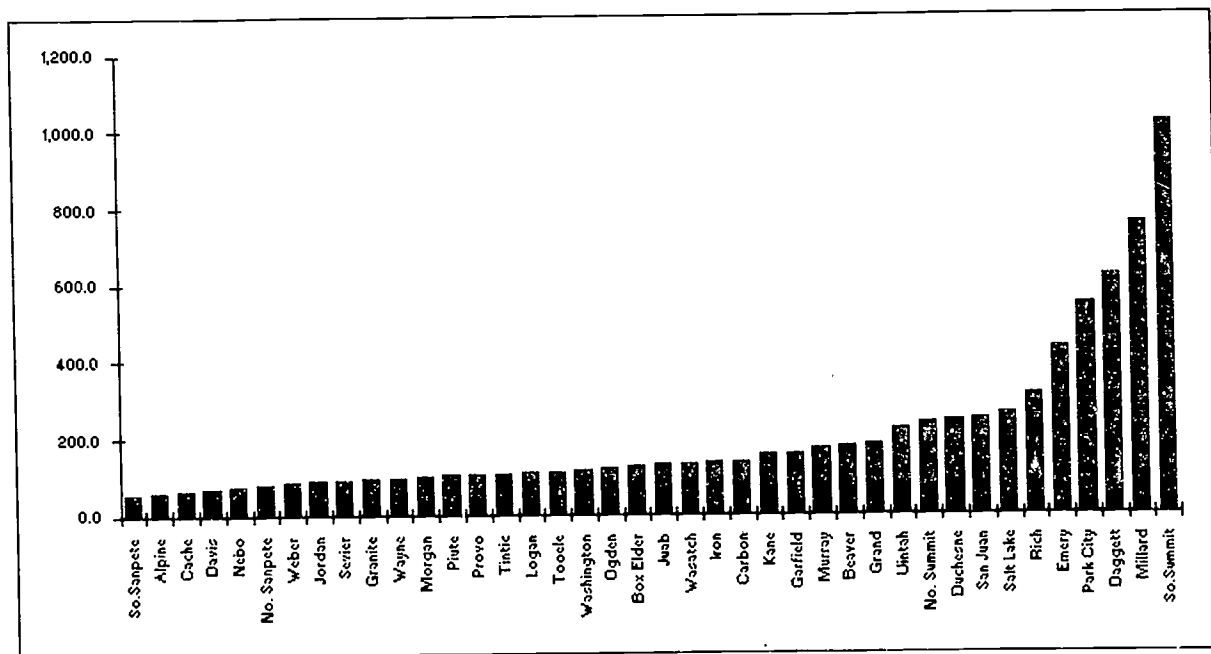
¹⁸⁴ Monk, David H. (1990) *Educational Finance: An Economic Approach* McGraw-Hill Publishing Company.

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to raise revenues for public education by the number of students it needs to serve. Thus, despite Granite's large tax base, it is only able to raise \$97.10 per pupil for every mill levied against its property base (a tax of 0.001). Tintic, despite its comparatively small tax base, is able to raise \$104.90 per pupil for every mill levied against its property base. Given these per pupil revenue calculations, the fiscal capacity of the two districts is similar. However, some variations in district fiscal capacity within the state are much larger, ranging from a district able to raise only \$54.10 per pupil for every 0.001 tax levied to one that is able to raise \$1,190 per pupil at the same tax rate. In other words, the fiscal capacity of districts to provide for their students varies by a factor of almost 19, from the minimum to the maximum. These differences are illustrated in Graph 1.

If public schools relied exclusively on the property tax for funds to provide educational services, then these fiscal discrepancies would represent significant inequities in educational opportunities for students. It is due to such potential inequity that states have intervened with an increasingly large share of the support for public education. Despite these efforts, the discrepancies in local wealth and the availability of fiscal resources to support educational opportunities for students still presents cause for concern, and has provided the basis for continued litigation against the constitutionality of existing school finance plans.

Graph 1:
Per Pupil Revenues Raised By One Mill Tax Against Property



While equalization of educational opportunities serves as a fundamental reason for state finance of public education, another consideration includes coping with inequities in taxpayer effort. In many cases, taxpayers in poorer districts tax themselves at a higher rate than their counterparts in wealthy

districts. Despite such efforts, taxpayers in poorer districts are unable to raise the level of support for public education as much as taxpayers in wealthier districts who are paying less tax.

In Utah, this problem is evidenced by the fact that the correlation between taxpayer effort (the total property taxes levied against property for public education) and fiscal capacity (the per pupil wealth of the district) is a negative 0.638. This means that, in general, as the capacity of a district to provide fiscal support for public education increases, the rate at which community members tax themselves decreases. Promoting increased taxpayer equity has long been a school finance concern, and with just cause.

One of the goals of school finance is to promote a greater degree of fiscal neutrality among districts within a state. This means that the delivery of educational services would not depend upon the wealth of the district but rather would be fiscally neutral. Efforts to equalize the fiscal resources necessary to provide a Minimum School Program are at the heart of Utah's school finance plan. The plan is based first on the proposition of equalizing the fiscal resources of each district up to a prescribed minimum (the Foundation grant). The theoretical framework for this plan, on which Utah's Minimum School Program is based, is discussed in the next section.

UTAH'S PLAN FOR EQUALIZATION

Utah's school finance plan is based fundamentally on the principles of what is known as the Foundation Plan.¹⁸⁵ Today, variations of this basic school finance plan are used by many state governments. Through this funding plan, state aid is linked solely to the fiscal capacity of the school district. The provision of state grant monies is designed to establish an inverse relationship between the amount of state aid provided school districts and their fiscal capacity. The Minimum School Plan links the distribution of state revenues to an assessment of a district's programmatic and student need. The Foundation Plan is discussed first, and then details about the Minimum School Plan. The sources of revenue to support these efforts are discussed after the intention of the equalization plans is clarified.

FOUNDATION PLAN

Three components characterize most foundation plans: 1) A required minimum foundation tax on property, 2) a specified foundation grant that ensures all public school students are supported at a per pupil minimum allocation level, and 3) provision for local taxation above the minimum foundation tax. The goal of this plan is to equalize revenues to a prescribed minimum while not limiting local incentive to raise revenues above the minimum.¹⁸⁶

¹⁸⁵ This type of school finance plan had its origins in the work of George Streyer and Robert Haig during the early part of the twentieth Century.

¹⁸⁶ Many school finance text books deal extensively with the character of foundation plans, see for example, Monk, 1991.

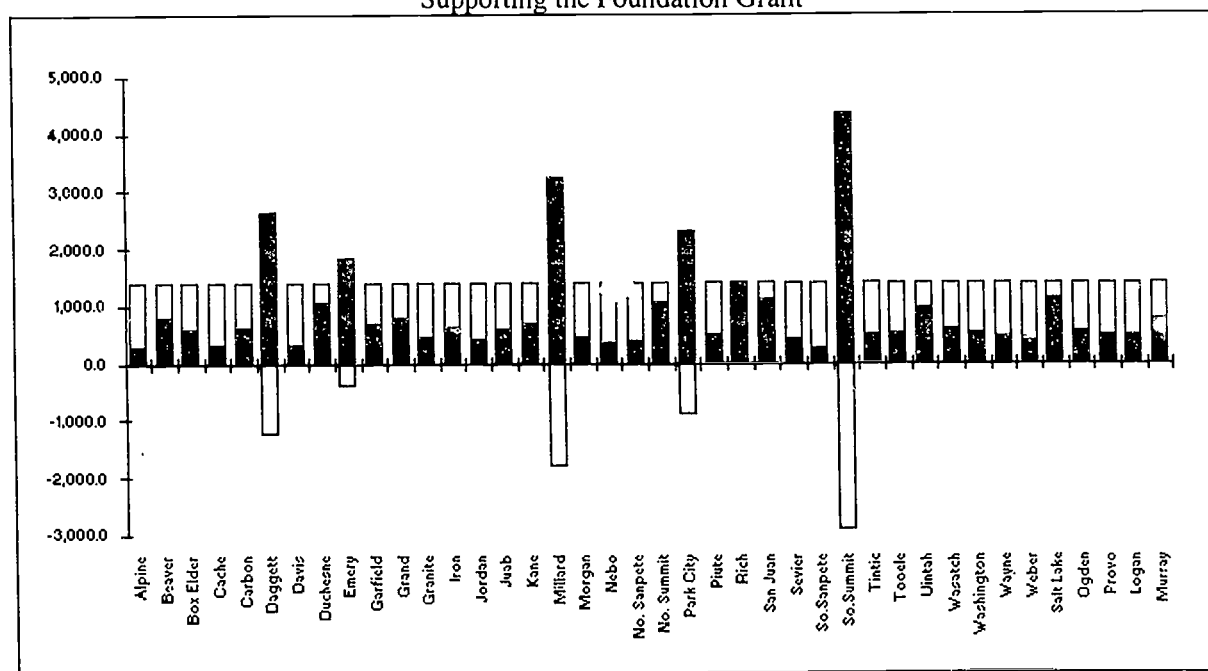
Public School Finance

Utah's foundation tax, which is levied against property, is known as the Required Basic Levy.¹⁸⁷ In the 1991-92 school year this tax was established as 0.004275, or approximately 4.25 mills. All 40 of Utah's school districts are required to levy this tax. It is important to note, however, that this is only one among many property taxes levied in support of public education.

The foundation grant is the second component of a foundation plan. Utah's foundation grant is generally described in terms of the weighted pupil unit¹⁸⁸ (WPU), which in the 1991-92 school year was assigned a value of \$1408; in 1992-93, the value of the WPU was increased to \$1,490. The foundation grant ensures that the fiscal support available to all students, up to the prescribed foundation minimum, is the same regardless of a district's fiscal capacity. Thus, where the fiscal capacity of a district (its ability to raise revenues divided by its need) is such that it can only raise a portion of the \$1408 foundation grant, the state supplements by providing the balance amount in aid.

An illustration from Utah school districts helps clarify the point. Tintic, using the foundation tax of 0.004275 against the value of its property, is able to raise \$448.60 per pupil. Since Utah State's foundation grant assures that each student will receive \$1408 (in 1991-92), the state's contribution to Tintic is the balance of \$959.40 per pupil.

Graph 2:
Illustration of State's Contribution
Supporting the Foundation Grant



The effect of this foundation grant can be seen in Graph 2. Each district's contribution to the foundation grant is illustrated in black; the top part of the column (in white) is the state's contribution:

187 Utah Code 53a-17a-133

188 The Weighted Pupil Unit (WPU) is a measure of need as well as a fiscal distributional unit assigned a specific value intended to ensure the provision of a regular basic program to each student.

the net effect is to equalize revenues across all the districts. This is true, except for the obvious cases where the fiscal capacity of districts is such that they can raise, using only the foundation levy, more than the foundation grant allows (\$1408 per pupil). In such cases the state recapture (the revenues generated above the foundation grant, illustrated in the white column below the line) as a negative state contribution. Money recaptured is used by the state to support the foundation grant. The net result is that the revenues available to schools, up to the foundation grant, are identical for all districts.

OTHER PROPERTY TAXES: SOURCES OF INEQUALITIES?

As noted above, the foundation tax is only one of several taxes that can be levied by a school district against its property. Table 7.1 describes other property taxes levied in support of schools, and includes the average and range for each tax across Utah's 40 school districts.

Table 7.1
Public Education Property Taxes, 1990-91

	# Dist	Avg	Min	Max	Ceiling
Basic Foundation Levy	40	.004275	.004275	.004275	.004275
Local Incentive	24	.00036	.0002	.0004	.0004
Voted Leeway	21	.00071	.0003	.00180	.0020
Board Leeway	24	.00364	.0002	.002	.0020
Capital Outlay/Debt	29	.00066	.00004	.0020	.0020
10% of Basic	40	.00112	.00020	.00212	*
Critical School	1	.000158	.000158	.000158	*
Voted Capital	20	.00071	.0003	.0018	.0020
Tort Liability	31	.00005	.00002	.0001	*
Transportation	37	.00015	.00003	.00020	.00020
Recreation	33	.00020	.00002	.00044	*
Local Retirement	1	.000002	.000002	.000002	.0001

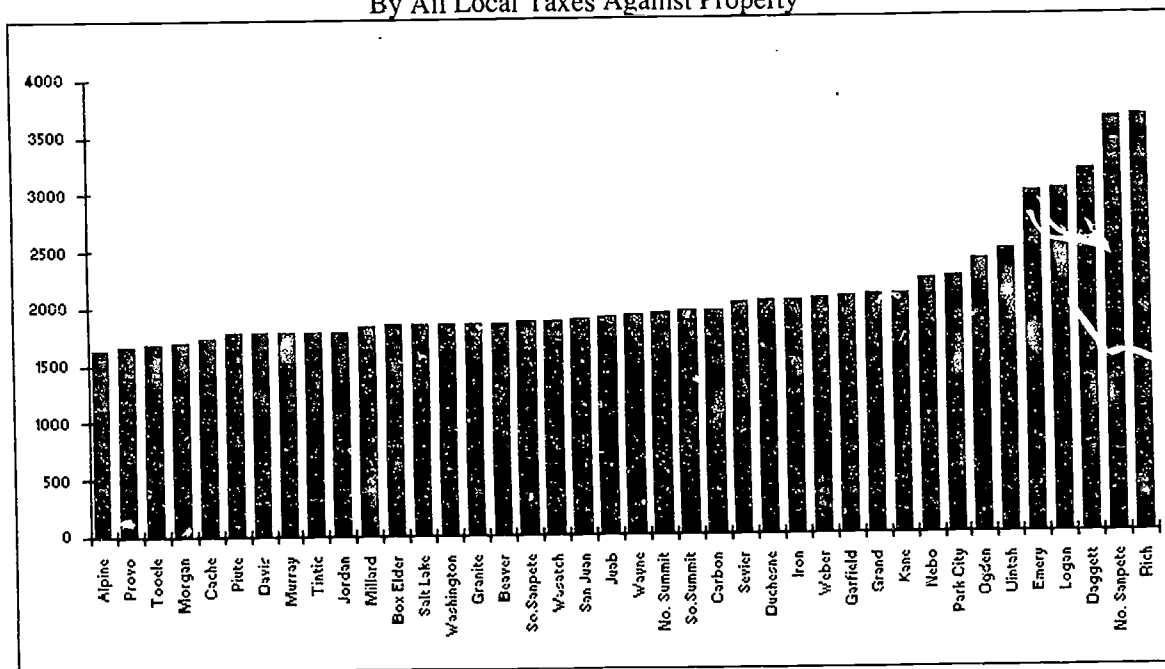
* no ceiling specified

Source: State Office of Education

When all additional taxes are added up, the total tax rate levied against property varies amongst Utah's 40 districts, from a minimum of 0.006378 to a maximum of .009525. The effect of these additional taxes, since the fiscal capacity of each district varies, is to create fiscal inequities among the school districts. This is readily illustrated in Graph 3, which adds the revenues generated by the foundation program to those generated by taxation above the minimum foundation tax.

The degree of these inequalities is small compared to some states. Many states, especially those facing constitutional challenges, have expenditure ratios of 1 to 4 or worse. Districts in these high-spending schools have 4 times the resources available to support the educational needs of their students than low-spending districts. In Utah, this ratio is about 1 to 2. In other words, the lowest expenditure district spends about half that of the highest spending district.

Graph 3:
Per Pupil Revenues Raised
By All Local Taxes Against Property



Up to this point, the notion of fiscal capacity has identified need simply as the number of students within a district. Certainly this is one component of need, but there are others. Many students require additional resources to achieve some specified goal, such as special or vocational education students. Some programs, such as music or the gifted and talented programs, require additional resources in order to operate. Certain small-sized districts, unable to take advantage of economies of scale, require additional revenues in order to function comparably to their larger counterparts. The second tier of Utah's school finance plan, known as the Minimum School Plan, attempts to equalize the ability of districts to provide a basic, or minimum, educational program.

The next section of this paper details the structure of the Minimum School Program. Following it is a description of the funding sources necessary to support these equalization plans. Revenues from property taxes only account for a relatively small percentage of the total revenue necessary to provide public education (about 37% in Utah). The remainder of the fiscal support for public education comes from either state (primarily the income tax in the state of Utah) or Federal sources.

THE MINIMUM SCHOOL PROGRAM

Utah's Minimum School Program, like the state's Foundation Plan, contributes to the equalization of fiscal resources among school districts. However, Utah legislatures recognized, when they framed the Minimum School Program, the need for more than a simple count of students; student needs vary, and the capacity of districts to provide needed services also varies. The Minimum School Program

attempts to equalize for these differences by providing support for a wide range of educational services, such as the following: the regular basic program, services for special education and vocational students, provisions for other students at risk, related services (including transportation, regional centers and retirement benefits) and equalized tax support for the Voted and Board Leeways. In other words, the Minimum School Program builds upon the equalizing principles implemented in the foundation plan but expands the state's support to equalize more completely the delivery of educational services relative to a district's fiscal capacity.

One way to see the extent of the support provided by the Minimum School Program is to examine the state's budget for the finance of public schools, as provided for in Senate Bill 212 (1992).¹⁸⁹ However, one point of clarification needed in order to understand the budget for the Minimum School Program involves the use of the weighted pupil unit (WPU). The weighted pupil unit, as well as being a distributional unit as discussed above, is a way of counting students relative to their need. The state legislature has determined that the value of a weighted pupil unit should correspond to the fiscal resources necessary to offer a student, grade 1 through 12, a regular basic education. These students are counted as one (WPU), although they may receive additional counts if necessary.

A kindergarten student, who spends about one-half a day in school, is counted as a fraction of a weighted pupil unit (.55). This example illustrates why the figure is called the weighted pupil unit. Students with exceptional needs--such as special or vocational education students--may receive additional weighted pupil unit counts because their need is greater than that of the "normal" student.

Other weighted pupil units are assigned to specific programs, or to account for administrative needs. The state's total need is estimated by applying the formulas appropriate to each of the line items listed in Minimum School Program. The total tally of weighted pupil units thus provides an index by which the educational need for the state can be assessed.

The value of the weighted pupil unit is set by the state legislature, and is determined in part by dividing estimates of total revenues for public education by estimates of the state's total educational need (the total number of WPUs). The resulting figure enables one to assign a dollar value to the estimates of need associated with each of the line items in the Minimum School Program. For example, the formula governing the finance of kindergarten students stipulates that each kindergarten student receives .55 the value of the WPU. To determine the fiscal need for revenues to support kindergarten one must determine the total number of WPUs and multiply it by the appropriate fiscal value for the WPU. In Table 7.2, the estimated number of weighted pupil units for kindergarten is 17,367 (the actual number of kindergarten students is almost twice this number). When this number of WPUs is multiplied by its assigned value (of \$1,490 for the 1992-93 school year) the total allocation supporting the finance for kindergarten is \$25,876,830. Similar calculations can be made for each of

189 An expenditure bill that amends the Minimum School Program Act -- Title 53A, Chapter 17, Utah Code Annotated 1953

the line items identified in the Minimum School Program in order to figure the amount of fiscal resources dedicated to that specific purpose.

Table 7.2 describes the proposed appropriations for the 1992-93 school year. This report is discussed, rather than the 1991-92 budget, because there are several significant changes in the funding of the Minimum School Program that deserve attention. These changes are highlighted first and then the structure and content of the Minimum School Program as funded by Senate Bill 212 is discussed.

RECENT CHANGES IN THE MINIMUM SCHOOLS ACT

In 1989 the Utah Legislature funded Utah's School Finance Task Force. Many of the recommendations of that committee have been put into law. Some of these changes are outlined in this section for quick reference:

- * A regression formula for Necessarily Existent Small Schools adjusted the distribution formula for this line item and provided additional funding.
- * All of the Special Purpose Optional line items were eliminated and these funds were incorporated into increases for the basic WPU and increased allocations for Career Ladders.¹⁹⁰
- * Career Ladders funds were moved into the value of the WPU.
- * Five special purpose line items were combined into a single experimental/developmental line item.
- * The formula and language of Board- and Voted-Leeways were modified to adjust and increase the guaranteed amount from the state.
- * The option for block grant districts to use capital outlay funds for maintenance and operation was eliminated.
- * The distribution of Minimum School Program funds will be made on a prior year membership-plus-growth basis.
- * The appropriation formula for social security and retirement eliminated the reimbursement requirement and provided a formula for distribution based on each district's proportional share of WPUs.
- * The formula for funding programs for students with disabilities was amended to eliminate the "level" system and establish a foundation allocation with provisions for future student growth.
- * The regression formula for transportation funding and the requirements for reimbursement were eliminated, and a new allowance formula was created to encourage efficiency and economy.

These changes have been incorporated into the laws governing the finance of public education in Utah. Some of these changes are obvious in the budget report presented and discussed below.

¹⁹⁰ Appropriations in this section included in the past: Instructional Media Centers, Extended Year, Compensatory Education, Elementary School Guidance, Community Education, Career Education, Education Field Trips, Elementary Music, Textbooks, Responsible Parenthood, Bilingual Education, Class Size Reduction, Special Needs, Advanced Placement and Concurrent Enrollment.

SENATE BILL 212: FUNDING FOR THE MINIMUM SCHOOL PROGRAM

Table 7.2
Minimum School Program
Senate Bill 212: 1992-93

I. BASIC SCHOOL PROGRAMS	1992-93 WPUS	AMOUNT @ \$1,490/WPU
A. REGULAR BASIC SCHOOL PROGRAMS		
1. Kindergarten	17,367	25,876,830
2. Grades 1-12	412,479	614,593,710
3. Professional Staff	37,212	55,445,880
4. Administrative Costs	1,840	2,741,600
5. Necessarily Existent Small Schools	6,100	9,089,000
<i>Sub-total (A1 To A5)</i>	<i>474,998</i>	<i>\$707,747,020</i>
B. SPECIAL PURPOSE OPTIONAL PROGRAMS ¹⁹¹		
C. RESTRICTED BASIC SCHOOL PROGRAMS		
1. Handicapped		
a. Handicapped Add-On WPU's	50,052	74,577,480
b. Self-Contained Regular WPU's	10,276	15,311,240
2. Handicapped - Pre-School	3,294	4,908,060
3. Extended Year Program For Severely Handicapped	229	341,210
4. Handicapped -State Programs	1,303	1,941,470
<i>Sub-total (C1 To C4)</i>	<i>65,154</i>	<i>\$97,079,460</i>
5. Vocational And Technical Education -District	16,857	25,116,930
6. Vocational District Set Aside	954	1,421,460
<i>Sub-total (C5 To C6)</i>	<i>17,811</i>	<i>\$26,538,390</i>
7. Youth-In-Custody	3,070	4,574,300
8. Adult High School Completion	2,948	4,392,520
9. Accelerated Learning Programs	1,765	2,629,850
10. At-Risk Students	2,297	3,422,530
11. Career Ladders	23,380	34,836,200
12. Class Size Reduction -First Grade	2,946	4,389,540
<i>Sub-total (C7 To C12)</i>	<i>36,406</i>	<i>\$54,244,940</i>
<i>Total Restricted Basic School Programs</i>	<i>119,371</i>	<i>\$177,862,790</i>
D. UNRESTRICTED BASIC PROGRAM -LOCAL	11,257	\$16,772,930
TOTAL BASIC SCHOOL PROGRAMS WPUS (A TO D)	605,626	\$902,382,740
E. RELATED TO BASIC PROGRAM		
1. Social Security And Retirement		164,186,261
2. Pupil Transportation To And From School		28,847,700
3. Contingency Fund		606,500
4. Incentives For Excellence		575,000
5. Secondary Vocational Education ACTs		2,218,000
6. Regional Service Centers		492,200
7. Awards For Excellence		200,000
8. Areas Not Served By ACTs		300,000
9. Class Size Reduction Second Grade		4,000,000
<i>Total (E1 To E9)</i>		<i>\$201,425,761</i>

¹⁹¹ Special purpose optional programs were deleted from the minimum school program. Most of the funding was put into the value of the WPU. Districts may continue to support special purpose optional programs from uniform school funds in the basic program.

Public School Finance

II. SPECIAL PURPOSE PROGRAMS	
A. EXPERIMENTAL- DEVELOPMENT PROGRAMS	3,915,100
<i>Total Special Purpose Programs</i>	<i>\$3,915,100</i>
III. BOARD AND VOTED LEEWAY PROGRAMS	
A. VOTED LEEWAY PROGRAM	46,068,529
B. BOARD LEEWAY PROGRAM	19,222,963
<i>Total Leeway Programs</i>	<i>\$65,291,492</i>
TOTAL MINIMUM SCHOOL PROGRAM (I TO III)	\$1,173,015,093
IV. CRITICAL SCHOOL BUILDING AID PROGRAM	
A. SCHOOL BUILDING SUPPORTED PROGRAM	6,458,000
<i>Total School Building Program</i>	<i>\$6,458,000</i>
TOTAL APPROPRIATION	\$1,179,473,093
V. LOCAL REVENUE	
A. BASIC LEVY (TAX RATE = 0.004275)	223,880,740
B. VOTED LEEWAY	40,436,525
C. BOARD LEEWAY	13,194,941
<i>Total Local Contribution (A, B, And C)</i>	<i>\$277,512,206</i>
VI. STATE REVENUE	
A. UNIFORM SCHOOL FUND	895,502,887
B. MINERAL LEASE AND OTHER SOURCES	6,451,000
<i>Total State Revenue</i>	<i>\$901,953,887</i>
TOTAL REVENUE (V TO VI)	\$1,179,473,093

The Minimum School Program is comprised of four major programs and two sources of funding: 1) The Basic School Program, 2) Special Purpose Programs, 3) Board and Voted Leeway Programs, 4) Critical School Building Aid Program, 5) State Supported Local Revenues and 6) State Revenues. Each of these is briefly discussed, highlighting changes recently made to the program.

THE BASIC SCHOOL PROGRAM (I)

The Basic School Program includes five groups of programs:

- I A) Regular Basic School Programs,
- I B) Restricted Basic School Programs,
- I C) Related to Basic Programs,
- I D) Unrestricted Basic program - Local, and
- I E) Related to Basic Programs.

The line item Special Purpose Optional Programs was eliminated as a budget category, which is discussed below.

The Regular Basic School Program (IA)

The Regular Basic School Programs include appropriations for kindergarten, grades 1-12, professional staff development, administrative costs, and necessarily existent small schools. The intention of these appropriations is to ensure the provision of a "Regular Basic School Program" to each student. The definition of a "Regular Basic School Program" is not specified except in terms of equalizing fiscal resources.

Equalization within this, as well as other, sections of the Minimum School Program is operating along two dimensions. First, the Foundation Plan ensures that each district is receiving some minimum level of funding in relation to their need (their capacity to raise the minimum Foundation Grant at the specified minimum Foundation Levy). Second, equalization has extended beyond concern about equalizing the foundation grant, and now includes efforts to equalize the fiscal capability of districts to provide basic services. In other words, where the Foundation Plan attempts to equalize the revenues generated from a specified Foundation tax, the Minimum School Program attempts to equalize the capacity of districts to provide services. This is the reason funding for administration, professional services and necessarily existent small schools is provided.

Appropriations for each of these programs, while based on the WPU, differ in structure. As discussed above, kindergarten students receive 55% of the value of the WPU, because kindergarten students attend school for only half a day. Each student enrolled in grades 1 through 12 receives the value of one full WPU. Each district receives the value of 46 WPUs to support a minimal administrative program. Appropriations for the necessarily small schools and professional development, spelled out in the Minimum School Program, are more complex formulas that provide district with necessary funding to ensure students in such districts a basic school program. The funding for the Regular Basic School Program is intended to equalize district capacity to provide basic educational services appropriate to its need.

Reallocation of Special Purpose Optional Monies (I B)

Until this year, the Utah's State Legislature provided for a number of special purpose optional programs through the Minimum School Program, including: Instructional Media Centers, Extended Year, Compensatory Education, Elementary School Guidance, Community Education, Career Education, Education Field Trips, Elementary Music, Textbooks, Responsible Parenthood, Bilingual Education, Class Size Reduction, Special Needs, Advanced Placement and Concurrent Enrollment. This year, 1992-93, following the recommendations of Utah's Task Force on the Finance of Public Education, the Legislature deleted these appropriations. Districts are still able to provide support for these programs, but funds for the program are now allocated from the basic WPU. According to the Governor's Budget Report (1993), about \$26 of the increase to the basic WPU came from a reallocation of monies previously appropriated to special purpose optional programs. The remainder of this money (previously allocated to special purpose optional programs) was used to restore prior cuts in the Career Ladder program.¹⁹²

¹⁹² Governor's Budget Report, 1993, Sec II page 32

Restricted Programs (I C)

The Restricted Basic School Program includes services for Handicapped Programs¹⁹³, Vocational programs, and other programs for which participation and funding are restricted. Allocations for Restricted Programs can be spent only as specified by law. These constraints distinguish restricted appropriations from the basic appropriations which are provided to districts with fewer legislative restrictions.

Senate Bill 212 amended the Minimum School Program Act¹⁹⁴ in order to make a number of changes, especially in the funding of the Handicapped programs. The Governor's Budget Summary Report notes that, "The formula for funding programs for students with disabilities (special education) was amended to eliminate the 'level' system and establish a foundation allocation with provisions for future student increases."¹⁹⁵ Students with disabilities will no longer be funded according to the level of services provided them; now funding will be based on a foundation plus growth plan.

There were several reasons for changing the funding formula for special education, not the least of which was that the Level System Formula required a tremendous amount of accounting to administer. The new formula will reduce the "red-tape." Another advantage of the new formula is that it will provide administrators with the details of their budget in advance of the school year, enabling them to more judiciously plan for the coming year. Finally, the new funding formula eliminates any possible competition among districts for available funds. These are several important advantages offered by the new funding formula.

The foundation on which the new formula funding special education is based was determined to be the 1989-90 handicapped allocation to districts. These allocations are intended to "reflect the direct cost of programs for those students conducted in accordance with definitions, guidelines, rules, and standards established by the State Board of Education in accordance with Chapter 64a, Title 63, Utah Administrative Rule-making Act. What this means is that the foundation grant for handicapped services is supposed to cover the actual costs incurred by districts providing these services. There is little evidence to support the assumption within this legislation that the 1989-90 school year covered actual costs, or that add-on appropriations to cover growth will sufficiently cover costs.

One of the concerns expressed by some educators about the Level System Funding Formula was that there were too few limitations, or caps, on the total funding amount for special education. The Foundation-Plus-Growth Plan has several caps. First, the foundation grant is fixed at the 1989-90 appropriations. Second, the appropriation for growth is more or less fixed; lesser of either the growth in special education ADM over prior 2 years or previous fall-to-fall total student enrollment. Third, no

193 The language referring to these students is changing and it is now more common to refer to handicapped students as students with disabilities.

194 Title 53A, Chapter 17, Utah Code Annotated 1953 (1992).

195 Governor's Budget Report, 1993 Sec. II page 32

district is allowed to identify more than 12.18% of its average daily membership as handicapped. a cap that the Level System Funding Formula also imposed. It remains to be seen how successfully these amendments will fund special education programs within the state.

There are numerous other programs funded under the Restricted Programs category; three will be commented on briefly; each of these are line items in the Minimum School Program budget. Funding for vocational programs has been and continues to be based on a level system. This system attempts to reimburse districts for the services provided students, and provides an explicit justification for the relationship between funding and service rendered. Where students require more intensive services, districts are reimbursed with increasing numbers of weighted pupil units.

Funding for At-Risk students was increased by \$1,199,298 with special provisions for: 1) teenage pregnancy prevention, 2) homeless and minority students, 3) the Math, Engineering, Science Achievement (MESA) program, and 4) family education. The MESA Program was funded for the first time this year and received a \$156,000 appropriation. The funds related to MESA and family education are distributed among districts on a competitive basis, with individual schools and districts submitting proposals that are reviewed by program directors.

Class size reduction is also funded under this category. The legislature appropriated \$4,389,540 to reduce the average class size in the first grade. Each district receives its allocation based on the number of first graders they have as a percentage of the total number within the state. If a given first grade class has less than 20 students, then the district is directed to reduce class size in other grades, with priority given to kindergarten and second grade. Another \$4,000,000 was allocated this year for class size reduction in grade two, as appropriated by Utah's legislature (H.B. 245).

Other Restricted Programs not discussed here include Youth-In-Custody, Adult High School Completion, Career Ladder and Accelerated Learning Programs. These are each funded according to the specific details outlined in the Minimum School Program Act. The limitation of space and purpose preclude a detailed description of each program in this paper.

Unrestricted Local Program (I D) and Related to Basic Programs (I E)

The state's contribution for the local program is a block grant (unrestricted funds that may be used by the district as necessary) providing districts with support for: 1) maintenance and operation costs, 2) capital outlay and debt services, and 3) a combination of these costs. Allocations for these funds are based on prior year WPUs for grades K-12 and necessarily existent small schools.

Programs Related to the Basic Program include social security and retirement, transportation, a contingency fund, incentives for excellence, secondary vocational programs, the regional service centers, awards for excellence and areas not served by ACTs. Local school boards can still impose voted and board leeway taxes on property to hire teachers but they no longer receive state funds for social security and retirement if they do so.

The transportation formula is in the process of being substantially changed from a "reimbursement" program to a "generation" or "prediction" funding system. Reimbursement for transportation funding has historically been done on a district by district cost basis. This funding mechanism was difficult to manage, leading to questions about the formula and significant delays in reimbursement. The generation formula, using a linear density regression model to predict costs is being implemented as an alternative funding mechanism. This model would predict funding, providing it early to district administrators. Further, the cap on funding is believed to enhance efficiency since the limitation of funding acts as an incentive to utilize available resource prudently.

SPECIAL PURPOSE PROGRAMS (II)

Last year 5 of the special purpose programs identified as line items were consolidated into a single appropriation, which is now known as Experimental and Developmental Programs.¹⁹⁶ The number of line items funded in the Minimum School Program had increased significantly over the last decade; unnecessarily complicated.

The state's contribution for experimental and developmental programs is allocated in three parts. The first (34%) is divided equally among the state's 40 school districts. The second (41%) is distributed to each district on the basis of its kindergarten through grade 12 average daily membership. The final appropriation (25%) is distributed by the State Board in accordance with Chapter 46a, Title 63 Utah Administrative Rulemaking Act. In general the funds are used to develop experimental programs, for which state support is available for only 3 years, or to provide for training and planning efforts.

BOARD AND VOTED LEEWAY PROGRAMS (SECTION III)

This section of the budget for the Minimum School Program provides state support for the Voted Leeway and Board Leeway Program. These taxes are described as Leeways because they allow districts to raise revenues above the equalized minimum foundation grant, the revenues for which were equalized by the state.¹⁹⁷

Enactment of the state supported voted leeway program requires a majority vote by electors within a district. This allows a district to maintain a school program which exceeds the cost of the basic program. Under the voted leeway program, the "state shall contribute an amount sufficient to guarantee \$21 per weighted pupil unit for each .0002 of the first .0004 per dollar of taxable value and \$4.56 per weighted pupil unit for each additional .0002 per dollar of taxable value raised locally, not to exceed .002 per dollar of taxable value."¹⁹⁸ The state guarantee will increase by \$1 per year for

196 Utah Code, 53a-17a-132

197 Section 53a-17a-1e3, Utah Code Annotated 1953 (now Chapter 72, Laws of Utah 1991)

198 Section 53a-17a-1e3, Utah Code Annotated 1953 (now Chapter 72, Laws of Utah 1991)

each .0002 tax of the first .0004 until 1995 when the state's guarantee will be \$24 for each .0002 of the first .0004 per dollar of taxable value.

The same dollar guarantee per weighted pupil unit applies to the Board-Voted Leeway. A majority vote by community members opposing the board leeway does not, however, deprive the board the right of imposing the tax. The Board-Voted Leeway is designed to give the Board, not the public, final say over whether to impose additional taxes. If a school district used both Leeways the state guarantee would apply to a maximum total of .0008 per dollar of taxable value.

CRITICAL SCHOOL BUILDING AID PROGRAM (SECTION IV)

Monies from Mineral Lease Funds (\$3,765,800) and from the Uniform School Funds (\$2,692,200) are used to support the critical school building fund. These appropriations are intended to assist schools facing a critical building problem. Support for this purpose utilizes the same type of foundation formula as Utah's maintenance and operation equalization formula. However, the degree of equalization for building is relatively low because the percent of State aid is about 10% compared to 72% for the M&O formula. The intention of the formula is to provide districts with support for continuing facilities maintenance and expansion, or assisting districts confronted with rapid growth and expansion.

In combination, the effects of the foundation program and the Minimum School Program described above, do much to assure that students and programs are at least minimally financed. These appropriations reduce the fiscal inequalities among the districts within the state. According to the Policy Information Center, Utah's ratio of educational spending difference between high and low spending districts is relatively low.¹⁹⁹ This is one indicator of the degree to which fiscal inequalities exist within a state. Equalization of fiscal resources among Utah's school districts has resulted in considerable state support. In 1991, 56% of the resources to support public education came from the state; local revenues accounted for 37.7% and Federal support was 6.3% of the total budget. In the section following, the sources of state funding supporting public education are identified and described.

SOURCE OF FUNDING FOR PUBLIC EDUCATION

The State Legislature, in Senate Bill 212 (1992), appropriated \$1,169,015,093 for the Total Minimum School Program: State appropriations accounted for \$897,502,887 of that total, and \$277,512,206 came from local revenues (basic levy, voted leeway and board leeway). Local funds accounted for 23.7% of the total cost for the Minimum School Program (the total local contribution--about 37%--is larger than this because of the additional property taxes levied within school districts

199 Policy Information Report, The State of Inequality. Educational Testing Service, Princeton, New Jersey, 1991.

including capital outlay and debt service). In this section, the source of revenues supporting the state's contribution to the Minimum School Program is discussed.

STATE EXPENDITURES FOR PUBLIC SERVICES

Funding of public education is one of the many public services provided by the state. Table 7.3 provides a summary of state expenditures by service area for fiscal years 1989-90 to 1991-92. The table is divided into two panels. The first panel, labeled "Actual Expenditures," provides the dollar figure for expenditures according to purpose. Expenditures for public education in 1989-90, for example, were \$1,119,296,000.

The second panel, labeled Percentage Of Total, describes the Actual Expenditures as a percentage of the total Operations Budget. In 1989-90, for example, 40.7% of the total Operations Budget was allocated to public education.

Table 7.3
Summary of Utah Expenditures From All Sources,
1988-90 to 1991-92 (All Dollar Figures In Thousands)

PURPOSE	Actual Expenditures			Percentage of Total		
	1989-90	1990-91	1991-2	1989-90	1990-91	1991-2
Business Labor & Ag.	\$64,429	\$68,571	\$71,251	2.3%	2.2%	2.2%
Community & Ec Dev.	52,624	49,994	58,525	1.9	1.6	1.8
Corrections	79,216	95,673	100,522	2.9	3.1	3.1
Courts	40,554	54,439	50,710	1.5	1.8	1.6
Elected Officials	21,728	26,666	29,180	0.8	0.9	0.9
Environ. Quality	19,062	23,636	30,350	0.7	0.8	0.9
Gov. Operations	68,046	71,846	75,629	2.5	2.3	2.3
Health	350,868	409,552	465,874	12.7	13.4	14.3
Higher Ed.	383,426	418,616	432,752	13.9	13.7	13.3
Human Serv.	294,320	332,098	369,528	10.7	10.8	11.4
Legislature	6,677	7,790	8,244	0.2	0.3	0.3
National Guard	3,923	4,906	4,379	0.1	0.2	0.1
Nat. Resources	60,557	64,295	69,581	2.2	2.1	2.1
Public Ed.	1,119,296	1,232,522	1,289,235	40.7	40.2	39.7
Public Safety	44,384	45,873	45,363	1.6	1.5	1.4
Transportation	143,863	156,140	146,614	5.2	5.1	4.5
Operations Budget	\$2,752,973	\$3,062,617	\$3,247,737	100.0%	100.0%	100.0%
Total Budget ²⁰⁰	\$3,190,904	\$3,443,963	\$3,707,711			

State of Utah, Budget Summary, Fiscal Year 1992

Several important points can be highlighted with reference to this table. First, it should be re-emphasized that public education is one among many services supported by state government. Allocations made to public education necessarily are at the expense of supporting other important

²⁰⁰ This includes Capital Outlay, Debt Service and Other Expenditures

public services. Second, expenditures for public education are the largest single line item in the budget; about 40% of the total Operations Budget during the last few years. Expenditures for Higher Education account for an additional 13 to 14% of the Operations Budget. In combination, in 1990-91, the budget for public and higher education accounted for 53.0% of the total Operations Budget in Utah. Third, while the allocation for public education has been and continues to be the single largest expenditure for the state government, the proportion, as a percentage of the Operations Budget, has decreased slightly over the last few years.

UTAH'S GENERAL AND UNIFORM SCHOOL FUND

Two state fund accounts are used to support public services in Utah: 1) The General Fund, 2) The Uniform School Fund. State support for public education is funded primarily from the Uniform School Fund. Table 7.4, below, describes the source of revenues for that fund account.

Table 7.4
Uniform School Fund Revenues,
1988-90 to 1991-92 (All Dollar Figures In Thousands)

PURPOSE	Actual Expenditures			Percentage of Total		
	1989-90	1990-91	1991-2	1989-90	1990-91	1991-2
Individual Inc. Tax	\$659.6	\$705.0	\$758.0	84.7%	86.6%	87.3%
Corporate Fran. Tax	99.7	90.0	90.0	12.8	11.1	10.4
State Land Trust	4.5	5.0	5.9	0.6	0.6	0.7
Gross Receipts Tax	4.2	4.2	4.2	0.5	0.5	0.5
Other	11.2	10.0	10.0	1.4	1.2	1.2
TOTAL	\$779.2	\$814.2	\$868.1	100.0%	100.0%	100.0%

State of Utah, Budget Summary, Fiscal Year 1992

Approximately 86% of the revenue for the fund comes from state income taxes. Corporate Franchise taxes have steadily decreased over the years, from 12.8% in 1989-90 to 10.4% in 1990-91. This slight decrease raises questions about the economic vitality of the corporate world in Utah. State Lands Trust income accounts for a very small portion of the fund, as does the Gross Receipts Tax and "other" category.

The General Fund does not directly support public education (K-12) but it does provide support for other social services and higher education. Table 7.5 describes the sources of revenue for this fund account. The Sales and Use Tax account for about 82% of these revenues. The other 18% of the revenue sources are spread out among numerous other taxes.

Table 7.5
General Fund Revenues,
1988-90 to 1991-92 (All Dollar Figures In Thousands)

Revenue Source	Actual Expenditures			Percentage of Total		
	1989-90	1990-91	1991-2	1989-90	1990-91	1991-2
Sales & Use Tax	\$708.2	\$730.0	\$755.0	81.4%	82.0%	83.0%
Liquor Profits	16.6	16.0	15.5	1.9	1.8	1.7
Insurance Premiums	30.0	31.8	33.5	3.4	3.6	3.7
Beer & Tobacco	30.2	28.8	27.5	3.5	3.2	3.0
Oil Occup. Tax	24.7	27.6	33.1	2.8	3.1	3.6
Metal Occup. Tax	5.4	6.4	6.5	0.6	0.7	0.7
Inheritance Tax	7.6	6.0	6.0	0.9	0.7	0.7
Investment Income	17.9	15.0	13.5	2.1	1.7	1.5
Other	32.6	32.0	22.5	3.7	3.6	2.5
Tax Credits	(3.4)	(3.5)	(3.7)	-0.4	-0.4	-0.4
TOTAL REVENUE	\$869.8	\$890.1	\$909.4	100.0%	100.0%	100.0%

State of Utah, Budget Summary, Fiscal Year 1992

The General Fund and Uniform School Fund are only two among many sources of state revenue; others include: Transportation Fund, Federal Funds, Dedicated Credits, Mineral Lease Funds, Restricted and Trust Funds, Other Funds, and Property Tax. Table 7.6 provides an overview of where and how much of the budget for education comes from these various revenue sources. The table identifies nine revenue sources, which are the headings across the top of the table. Recalling that there are numerous other services funded by government, this table describes allocations only for public education. For the 1991-92 school year, revenues allocated for public education totaled \$1,309,943,400. Of these no revenues from the General Fund were contributed to finance public education. The Uniform School Fund contributed \$879,794,600, which was 67.16% of the total state funds available for public education. Federal funds accounted for about 8.97% of the total state funds available for public education. (These figures account only for state monies; earlier figures included all sources of funding and were slightly lower.) These calculations are made for each of the fund accounts in the table; property taxes accounted for 20.35% of the total funds available for public education.

This table helps clarify the sources of revenue for public education. For readers interested in more detail about these fund accounts, or about the legislation funding different components of the school program, the Governor's Budget Summary and the actual Senate bills are excellent sources of information.

Table 7.6
Source of Revenues As a Percentage
and By Type, 1991-92 (All Dollar Figures In Thousands)

	General Fund	Uniform School Fund	Transport Fund	Federal Funds	Dedicated Credits	Mineral Lease Funds	Restricted & Trust Funds	Other Funds	Property Tax	Total By Function
<u>Public Education</u>	\$0	\$879,794	\$0	\$117,565	\$4,497	\$630	\$11,636	\$44,246	\$266,574	\$1,309,943
<u>% of Public Ed.</u>	0.00%	67.16%	0.00%	8.97%	0.34%	0.05%	0.89%	3.38%	20.35%	100.00%
<u>Operations Budget</u>	\$848,806	\$910,319	\$115,388	\$721,293	\$258,915	\$7,695	\$118,788	\$46,089	\$266,574	\$3,293,866
<u>Ed Budget Funds as a Percent of Total Fund Allocations</u>	0.00%	96.65%	0.00%	16.30%	1.74%	8.19%	9.80%	96.00%	100.00%	39.77%

State of Utah, Budget Summary, Fiscal Year 1992

The bottom half of the table (lines 3 and 4) provides budget allocations for the state's total Operations Budget by source of revenue. The Total Operations Budget was \$3,293,865,900 for the 1991-92 fiscal year. The General Fund contributed \$848,805,900 to the total operations budget, but none of it went to fund public education (about a third of it did go to fund higher education). Of all the funds within the Uniform School Fund, 96.65% went to fund public education. Again these calculations are made across all funding categories. Property tax went exclusively to fund public education. Of the total budget (all the revenues raised for public government), 39.77% went to fund public education.

UTAH'S ABILITY TO MEET THE DEMAND FOR EDUCATION AND TAXES

The condition of education in Utah is generally characterized by three assumptions: 1) that Utah provides for an unusually large student population relative to the state's total population, 2) that Utah is a relatively poor state, 3) that tax effort by Utah's citizens is high. This is to say that the need (in terms of students to serve) is great, the ability to pay (in terms of per capital income and hence the tax base that supports public education) is low, but the effort (in terms of tax load) to support public education is high. In this section, these three elements are discussed and compared to both U.S. and mountain state averages.

ENROLLMENT GROWTH

Utah has the highest percent of school age children (ages 5 to 17) of any state in the country. The national average for this statistic is about 18.3%; whereas, 26.7% of Utah's population are school age residents. This unusual population configuration is further illustrated by comparing the number of school age children (5-17) to working adults (18 to 64). Utah has 48 school aged children to every

100 working adults, which is 19 per 100 adults more than the national average.²⁰¹ These data suggest that the student load in Utah is large. Utah's student enrollment is not growing as rapidly, however, as states like Arizona and Nevada, which are growing more than 5% per year. While Utah's enrollment growth as a percent of the base is only slightly above the national average (2.06% last year) the additional enrollments are equivalent to adding an additional district the size of Murray or Tooele.

INCOME AND TAXES

Utah's per capita income, of \$14,529, is well below the national average of \$19,082: about 75% of the national average.²⁰² In fact, for the year 1990, Utah's ranked per capita income was 48th among the states. This figure is somewhat misleading, as the Utah Foundation points out, because the unusually large percentage of student age residents drives the average per capita down.²⁰³

Another way to consider the fiscal capacity of residents within the state is to use income per household. The Utah Foundation reports that Utah's household income (\$46,463) is above the national average (\$45,854) and ranks third among the mountain states.²⁰⁴ This household income statistic, coupled with the facts that Utah has one of the lowest poverty rates in the country and that the cost of living index is below the national average, suggests that the Utah is not a poor state, as commonly characterized.

TAX LOAD

It is commonly assumed that the burden on resident tax payers in Utah is high, especially for education. Nationally, income earners pay about \$65.97 for education per \$1,000 of personal income. The Mountain state average is \$82.41 for education per \$1,000 of personal income while for Utah the figure is \$91.91. These figures suggest that Utah's tax burden for education is heavy. However, when the total of state and local taxes per \$1,000 of personal income is compared to other states, Utah's rate of \$122 is only slightly above the national average. Further, property taxes per \$1,000 of personal income are only slightly above the national average, \$33 vs. \$30 respectively, but these taxes are much higher than the average for the Mountain states (which is \$21). In general, when the total tax burden in Utah is compared to the national average it ranks about 16th or 17th (depending on the income level) within the country.

Conclusions about the fiscal capacity and fiscal effort of the state to provide for the educational needs of its students are not obvious. It is apparent that tax payers are putting forward significant effort to support public education: State appropriations are about 40% of the total budget compared to

201 Utah Foundations Research Briefs, No. 92-3

202 Utah Foundations Research Briefs, No. 92-3

203 Utah Foundation Research Briefs, No. 92-33

204 Utah Foundation Research Briefs, No. 92-3

a national average of 34.5%. However, Utah is not a poor state, nor is its effort to support public education exceptional beyond the normal range of effort in other states. The student load is exceptional and will likely continue to be so.

One might ask where Utah will find additional revenues to support public education. The state's education appropriation for education as a percentage of total appropriations is currently among the highest in the country, so it is not likely that increases will be easily had from the state. If the economy stays strong it is possible that additional revenues could be generated from growth, but given the needs of other services it is not obvious that all these monies will go to education. This leaves the property tax as one of the most likely sources for increased revenues. Utah's property tax rate is about at the national average, and housing values have not been super-inflated. Increases in housing values and increases in property taxes are a possible source of expanded funding in the future.

CURRENT EVENTS

Several issues, among many, are identified here as worth keeping track of in the near future. The first is the capital outlay equalization legislation, House Bill 65, which was passed into law in 1992. As the Utah Foundation report notes, prior to House Bill 65, the state's equalization plan was primarily focused on basic school program and leeway programs.²⁰⁵ The state provided some critical building aid but capital facilities were primarily the responsibility of local districts. Enrollment growth and old buildings have created a dilemma for some school districts because they have neither the capital to construct more building nor space to cope with existing enrollments. Year-Round schools is one example of efforts to manage this problem. The passage of House Bill 65 is another.

House Bill 65 requires every district to impose a tax rate of 0.04 % for the purposes of supporting capital construction among Utah's school districts. This tax increases by 0.02 % capping in 1995 at 0.1 percent. Districts can qualify for these funds only if they impose a minimum basic tax of .02% and are below the state average yield per student on the tax.

One of the problems with the bill, as it now stands, is that the components for distributing and recapturing funds are rather complicated. For example, as quoted in the Utah Foundation report, components for qualifying for the distribution of funds include "consideration of the assessed valuation per student of real property within the school district; the projected growth in the district as related to "unhoused" students; the district's total tax rate levied for capital outlay and debt service; the district's outstanding and authorized bounded indebtedness and the districts use of alternative programs, such as extended day, double sessions, and Year-Round school...(p. 129)."

These allocation criteria are presumably intended to ensure local effort to support capital facilities, as well as to promote an equalization plan that recognizes the many factors affecting th

205 Utah Foundation Research Report. Utah's School Equalization and House Bill 65, October 1992.

ability of a districts to provide such facilities. In the end, however, the formula creates counter intuitive results that underlie many of the current challenges to the plan. For example, South Summit, the wealthiest district in the state in terms of per pupil property values, would contribute less to the equalization plan than many other districts because its capital and debt service tax rate is high (87%) relative to the 2% levy. Per pupil property values for Salt Lake School District are considerably less than those for South Summit, but under the current plan Salt Lake would contribute much more into the system because their capital and debt service rate was comparably low (57 % of the 0.02 % levy). These circumstances leave the perception that districts are punished for being frugal, and that wealthier districts benefit more from the plan than poorer districts. A second factor that affects the distribution of funds through this law is a district's level of bonded indebtedness. These factors create the appearance that a district's ability to pay for such facilities and state support for such a need are not well matched.

The Utah Foundation report, referenced above, provides a fuller picture of the complexities of this law. While considerable controversy surrounds this law, support for the equalization of capital outlay appears to be widespread in Utah. The question is how should state support for capital equalization be fairly distributed. An alternative proposal for equalization of capital outlay has been suggested by school districts as well as the Utah Foundation. This proposal would follow the format of the equalization plan for maintenance and operation of the regular school program, where all districts paid a foundation tax and were reimbursed according to their fiscal capacity. Such a formula is easily administered, but does not obviously address the range of critical facility problems districts may confront. Nonetheless, such a formula would address the obvious incongruities that currently characterize House Bill 65.

A second issue to watch is the fee waiver controversy. This is a fundamental equal access issue that has been ignored throughout the state for years. The Utah Code explicitly states that school districts are to allow fee waivers for eligible students. A study by Utah Issues²⁰⁶ suggests that this has not been followed to the letter or intent of the law. Considering the fiscal constraints public schools face, waivers of user fees will not be without consequences. Where districts are not able to collect resources from user fees programs previously available may be abandoned. The result may be a depletion of services for every one.

Mainstreaming of special education students and the trend toward eliminating the differentiation between regular and special education is another important issue affecting school finance as well as educational programs. The recent changes in Utah's funding mechanisms for special education can be construed as a significant step towards incorporating these funds into the regular, rather than special, funding mechanisms.

206 Weathers, S & Crim, B. (1992) School Fees in Utah: The Law and the Practice. Utah Issues Information Program, Inc SLC, UT

School trust funds are likely to be an interesting topic in the coming years. Recent questions about how effectively these lands are managed, in terms of raising revenues for public education, have brought the issue to the fore. One of the many problems managing these lands for profit is that they are scattered throughout the state. A recent effort to effect a land exchange, so the school trust lands could be more effectively managed, failed. This issue will likely remain in the spot light because the school trust funds represent one relatively non-controversial source of new income for public education.

ON THE HORIZON

The issue of choice has surfaced as a value underlying much of the policy debate within the education arena. There is no single policy proposal which focuses the debate but rather a seemingly vast number of choice proposals, including: the call for vouchers, parental choice about the school their child attends, block grant funding, site based management (as a choice issue for professionals), choice with regard to public support for religious schools, and choice through the promotion of privately owned (for profit) schools. School choice issues are more closely associated with school finance issues than some might first think. Indeed, to the extent that school choice provides a means by which to enhance the efficiency of school operations it is a fundamental school finance issues that portends major changes in the future of public school finance. For this reason, the issues is briefly explored in this section.

Underlying the current call for greater choice in education is a concern about the efficiency with which schools utilize public dollars for educating America's youth. Public education consumes an enormous proportion of the resources available to support public services. While tax payers have probably always questioned how their hard earned money was spent by public officials, recent concerns about the accountability of educational investments has several particularly salient references that help clarify the problem.

Until the Coleman Report of 1966, it had long been assumed that greater investments in education led to more learning. The data presented in Coleman's report spawned deep questioning about such an assumption. In 1981, Hanushek, an economist, concluded that there was no evidence to support the assertion that educational resources were systematically related to the production of educational outcomes.²⁰⁷ In 1983, the National Commission on Excellence in Education published the report A Nation At Risk: The Imperative For Education Reform, which declared a call to arms to protect America's well being from the mediocre education provided its students.²⁰⁸ In 1982, Coleman, Hoffer & Kilgore published a report claiming that private schools, particularly religious schools, were

207 Hanushek, Eric A. 1981 Throwing money at schools. Journal of Policy Analysis and Management Vol 1 No 1 pp 19-41

208 A Nation At Risk: The Imperative For Education Reform 1983 National Commission on Excellence in Education: United States Department of Education, Washington DC

able to produce more educational outcome for considerably less inputs.²⁰⁹ In 1990 Chubb, & Moe published their book, Politics, markets, and America's schools, that added to the evidence that private schools more efficiently produce educational outcomes than public schools.²¹⁰ More, these authors argued that the fundamental reason for such a difference is that the bureaucratic structure of public schools is unresponsive to the market place. Private schools are more responsive, and hence schooling is more appropriately directed to consumers. It is in this broad sweep of events that one can follow how choice (particularly in the market place) is related to issues of accountability and efficiency.

Many educators, in Utah as well as in other states, have expressed concern that a move to market oriented choice schools would erode the equity gains that fundamentally underlie school finance and programmatic policies. Certainly, if schools were given entirely to the market, where unregulated schools sold their wares (be those what they may) the equity concerns associated with such a fundamental service as education would suffer.

Such a concern is, however, sensational, since no one - not even free market advocates such as Christopher Whittle--has suggested that schools be less regulated than other services (such as food services) operating within a market environment. In a regulated market it is very possible to establish policy incentives that would reward schools contributing to the equity goals that have dominated public education for so many years. The current fear of markets as a solution to increase the productivity of schools, as well as to promote choice among its consumers, is largely based on a narrow and improbable market model.

Alternatives do exist. David Monk, in his book School Finance: An economic approach, suggests that market oriented policies could be incorporated into existing school organizations. Such a proposal would take advantage of the administrative and organizational economies of scale that currently exist in schools while allowing greater choice among parents and students. The idea is relatively simple and is consistent with Utah's current emphasis on a minimum school program.

There exist considerable social benefits to having an educated populace, and this constitutes one reason for state intervention and support of public education. Monk's proposal is to maintain the current state support for a minimum school program, but allow parents and students to buy into programs, above the minimum school program, that are of special interest to them and their children. This idea would foster what is more popularly known as the school within a school. Where parents and students wanted special music, or advanced science classes (and the benefits for such a program accrue more to the students than to society) then parents and student would be asked to pay for a larger share of it compared to existing finance plans. Parents that banded together would be able to benefit from economies of scale, and further enjoy the administrative advantages of organizing through the

209 Coleman, James & Thomas Hoffer & Sally Kilgore 1982 April/July *Cognitive outcomes in public and private schools. Sociology of Education* Vol 55 pp 65-76

210 Chubb, John E. & Terry M. Moe 1990 Politics, Markets, And America's Schools. Washington D.C.: The Brooking Institution

school. The actual percentage of the cost parents paid for the service could depend upon their socio-economic factors as well as other policy considerations.

One example approximating such an idea is Utah's MESA Program. This program is designed to assist minorities and women get the educational background necessary to pursue careers in the math and science fields (fields in which these groups of students have traditionally been under-represented). The state legislature has funded this program because it serves to fundamentally support the social as well as economic welfare of the state. However, the organization of the program is not centrally located within school districts, but rather is organized as a collaborative partnership between education, business and community members. Parents are also actively involved with the program. MESA operates with its own board of directors, governance structure and funding sources. The legislature, rather than funding schools, has funded a program. District are consumers. District consumption is driven in part by student preferences and demands. The result is the development of a school within a school. A school within a school may portray the future of school organization and school finance.