Educator Supply and Demand in Washington State

2002 Report



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Collaborative Study Involving

- Office of Superintendent of Public Instruction
- Washington School Personnel Association
- American Association for Employment in Education

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Educator Supply and Demand in Washington

HIGHLIGHTS

- Teaching areas in which there is considerable shortage include special education, mathematics, and physics.
- Teaching areas in which there is some shortage include instrumental music, chemistry, choral music, English as a second language, Japanese, early childhood special education, biology, and bilingual education.
- Teaching areas in which supply/demand is balanced include visual arts, reading, dance, drama, English, English/language arts, early childhood education, elementary education, and social studies.
- History shows some surplus.
- Support areas in which there is considerable shortage include speech language pathologists, physical therapists, occupational therapists, and school psychologists.
- Some shortage is noted for school nurses.
- Approximately 11 percent of all teachers are eligible to retire in the next five years.
- Approximately 16 percent of all principals (17 percent elementary and 15 percent secondary) are eligible to retire in the next five years.
- Approximately 37 percent of all superintendents are eligible to retire in the next five years.
- Districts in 85 percent of the counties reported 2001-02 shortages in special education; districts in 72 percent of the counties forecasted special education as a considerable need area for 2002-07.
- Districts in 51 percent of the counties reported 2001-02 shortages in mathematics; these same districts forecasted mathematics as a considerable need area for 2002-07.

IMPLICATIONS FOR

Agencies, boards, and legislators involved in policy decisions:

- Examine preparation program capacity.
- Provide incentives for institutional collaboration to address personnel needs of rural and remote districts.
- Consider strategies for statewide recruitment and retention of educators.
- Secure legislative funding to support WATEACH.
- Consider compensation strategies and incentives to increase the supply of educators in considerable need areas.
- Consider geographic access to preparation programs.
- Support and expand alternative routes to teacher certification.
- Evaluate the overall impact of retire/rehire legislation.

Colleges and universities:

- Increase preparation program capacity in high need educator areas.
- Initiate preparation programs in counties with educator needs and little access to current programs.
- Form partnerships with districts, educational service districts, and businesses to provide performance-based preparation options for para educators and career changers.
- Expand recruitment efforts targeted toward retired military personnel, state and federal employees.
- Advise program applicants and community college and high school students about educator high need areas.
- Expand the number of articulated community college-four year institution programs in mathematics, sciences, and music.
- Redesign all preparation programs to include assessment of prior learning and experience of applicants.
- Establish performance-based criteria for early exit from all preparation programs.

• Consider supply/demand data when making decisions about enrollment targets and adding/deleting programs.

Personnel and human resources administrators in school systems:

- Gather retention data.
- Develop systems to forecast educator personnel needs for five years.
- Engage in statewide dialog related to recruitment and retention.

Media and general public:

- Develop a broader understanding of the complex issues associated with educator supply and demand.
- Promote the need for high quality educators in relationship to success for all students.
- Engage in dialog with legislators and key stakeholder groups to develop solutions to address the challenge of supply.

BACKGROUND OF THE STUDY

The first educator supply and demand report in Washington was issued in 2000. The 2002 study used the same survey instrument format. The organization and implementation of the study were supported by the Office of Superintendent of Public Instruction, the Washington School Personnel Association, and the American Association for Employment in Education (AAEE). The statistics were generated by the Research and Data Analysis Consultation Service at Ohio State University.

The intent of the study was to provide data to influence decisions and activities in the following ways:

- Guide policymaking by the State Board of Education.
- Assist the Office of Superintendent of Public Instruction in planning actions/initiatives appropriate to ESEA.
- Guide the Higher Education Coordinating Board in degree program approval and location of programs.
- Influence legislative funding.
- Inform the media and general public relative to issues in educator supply and demand.

- Influence federal grant proposal design.
- Create dialog among educator stakeholder groups and community-based organizations to solve supply challenges in their respective counties.
- Contribute to the 2000 baseline data to begin to analyze trends in educator supply and demand.

METHODOLOGY

The survey was mailed to all 296 school districts in Washington on February 22, 2002, with a requested response date of March 15, 2002. Phone call reminders were made by the Washington School Personnel Association until responses were received from 255 districts (86 percent).

Similar to the analysis process used in 2000, data were aggregated for 1) the actual number of vacant positions for the 2001-02 academic year; 2) administrators' perceptions of supply (availability of candidates) compared to demand (number of district openings) in 2001-02; 3) the number of eligible retirees 2002-07; 4) the forecasted need for replacement educators in all educator fields; 5) administrators' perceptions related to factors impacting the number of vacancies/new hires in 2001-02. In addition, data for forecasted teaching shortage areas were disaggregated by county for perceptions of supply compared to demand for 2001-02 and for forecasted needs.

Copies of 2002 Educator Supply and Demand Report

This report is available at the following website: <u>www.k12.wa.us/ProfEd</u>.

Tables

EDUCATOR DEMAND FOR 2001-02:

Table 1 documents the actual educator vacancies by field as reported by the districts that responded to the survey. Comparative data for 1999-00 are also provided.

Health/fitness was not included on the survey by error.

Teaching areas in which there were fewer vacancies in 2001-02 compared to 1999-00 were agriculture education, French, German, history, technology education, and traffic safety. Teaching areas in which the number of vacant positions significantly increased (50% or above) were drama, early childhood special education, elementary education, choral music, reading, and earth science.

Support staff and administrator fields in which there were fewer vacancies in 2001-02 compared to 1999-00 were occupational therapists and physical therapists. There were no fields that experienced a significant increase (50% or above) in vacant positions.

Table 1

Area	2001-02	1999-00	Difference
Agriculture Education	28	40	-12
Bilingual Education	103	71	32
Business Education	147	111	36
Dance	10	10	0
Drama	36	24	12
Early Childhood Education	76	69	5
Early Childhood Special Education	169	93	76
Elementary Education	3,059	2,039	1,020
English	377	279	98
English/Language Arts	328	284	44
English as a Second Language	177	126	51
Family and Consumer Sciences Education	83	77	6
French	30	41	-11
German	15	18	-3
Japanese	20	13	7
Spanish	132	122	10
History	92	104	-12
Library Media	151	111	40
Marketing Education	42	34	8
Mathematics	570	422	148
Music-Instrumental	118	88	30
Music–Choral	111	69	42
Music-General	141	126	15

Number of Actual Vacancies for Educators by Fields for the 2001–02 and 1999–2000 Academic Years

Number of Actual Vacancies for Educators by Fields for the 2001-02 and 1999–2000 Academic Years

Area	2001-02	1999-00	Difference
Reading	254	165	89
Science–General	236	227	9
Science–Biology	81	68	13
Science–Chemistry	49	33	16
Science–Earth Science	48	30	18
Science–Physics	35	26	9
Social Studies	282	263	19
Special Education	983	941	42
Technology Education	91	112	-21
Traffic Safety	22	39	-17
Visual Arts	76	56	20
School Counselor	264	238	26
School Psychologist	190	157	33
Occupational Therapist	71	84	-13
Physical Therapist	40	50	-10
School Social Worker	16	16	0
Speech Language Pathologist	182	171	11
School Nurse	94	87	7
Principal–Elementary	149	130	19
Principal–Middle School	81	61	20
Principal–High School	88	68	20
Superintendent	50	46	4

2001-02 data based on 86% of districts reporting 1999-00 data based on 92% of districts reporting

SUPPLY VS. DEMAND FOR TEACHING AREAS 2001-02:

Respondents were asked to compare their perceptions of supply (availability of candidates) with demand (number of district vacancies) in 2001-02. Table 2 documents the degree of shortage in rank order.

Areas with considerable shortage: special education, mathematics, physics.

Areas with slight shortage: chemistry, instrumental music, choral music, Japanese, English as a second language, early childhood special education, biology, and bilingual education.

Areas with balance: visual arts, reading, dance, drama, English/language arts, English, early childhood education, elementary education, and social studies.

Areas with slight surplus: history.

Table 2

Area	Mean	
Special Education	4.62	
Mathematics	4.24	
Science–Physics	4.22	
Science-Chemistry	4.17	
Music-Instrumental	4.17	
Music-Choral	4.10	
Japanese	4.04	
English as a Second Language	4.04	
Early Childhood Special Education	4.02	
Science-Biology	4.01	
Bilingual Education	4.00	
Science–Earth Science	3.97	7
Business Education	3.91	7
Technology Education	3.90	7
Spanish	3.90	7
Music–General	3.89	7
Agriculture Education	3.86	7
Family and Consumer Sciences Education	3.85	
Science–General	3.85	
German	3.81	
French	3.78	
Library Media	3.78	
Marketing Education	3.71	
Traffic Safety	3.41	
Visual Arts	3.37	
Reading	3.30	
Dance	3.27	
Drama	3.25	
English/Language Arts	3.24	
English	3.18	5 = Considerable Shortage
Early Childhood Education	3.15	4 = Slight Shortage
Social Studies	2.75	3 = Balanced
Elementary Education	2.75	2 = Slight Surplus
History	2.56	1 = Considerable Surplus

Table 3 provides comparative mean data for 1999-00 and 2001-02.

Table 3

Comparison Means for 1999-00 and 2001-02 for Administrators' Perceptions of Teaching Area Shortages

Aree	2001-02	1999-00	1
Area	Mean	Mean	
Special Education	4.62	4.45	
Mathematics	4.24	4.18	
Science–Physics	4.22	4.25	
Science-Chemistry	4.17	4.32	
Music-Instrumental	4.17	4.04	
Music-Choral	4.10	4.06	
Japanese	4.04	4.26	
English as a Second Language	4.04	3.83	
Early Childhood Special Education	4.02	4.20	
Science-Biology	4.01	3.96	
Bilingual Education	4.00	4.00	
Science–Earth Science	3.97	3.93	
Business Education	3.91	3.95	
Technology Education	3.90	4.18	
Spanish	3.90	3.94	
Music–General	3.89	4.01	
Agriculture Education	3.86	4.19	
Family and Consumer Sciences Education	3.85	3.74	
Science–General	3.85	3.92	
German	3.81	3.91	
French	3.78	3.85	
Library Media	3.78	4.00	
Marketing Education	3.71	3.81	
Traffic Safety	3.41	3.39	
Visual Arts	3.37	3.29	
Reading	3.30	3.29	
Dance	3.27	3.42	
Drama	3.25	3.74	
English/Language Arts	3.24	3.16	
English	3.18	3.17	
Early Childhood Education	3.15	3.35	5 = Considerable Shortag
Social Studies	2.75	2.72	4 = Slight Shortage
Elementary Education	2.75	2.56	3 = Balanced
History	2.56	2.77	2 = Slight Surplus 1 = Considerable Surplus

SUPPLY AND DEMAND FOR SUPPORT STAFF AND ADMINISTRATORS 2001-02:

Respondents were asked to compare their perceptions of supply (availability of candidates) with demand (number of district vacancies) in 2001-02. Table 4 documents the degree of shortage of support staff, principals, and superintendents.

Fields with considerable shortage: Speech language pathologist, physical therapist, school psychologist, occupational therapist.

Fields with slight shortage: school nurse, high school principal, superintendent, school counselor, middle school principal, school social worker.

Fields with balance: elementary principal.

Table 4

Rank Order Means of Administrators' Perceptions of Support Staff and Administrator Shortages

Area	Mean]
Speech Language Pathologist	4.54	1
Physical Therapist	4.51	
Occupational Therapist	4.48	
School Psychologist	4.42	
School Nurse	4.03	
Principal–High School	3.88	
Superintendent	3.71	E Considerable Shortage
School Counselor	3.69	5 = Considerable Shortage 4 = Slight Shortage
Principal–Middle School	3.68	3 = Balanced
School Social Worker	3.58	2 = Slight Surplus
Principal–Elementary	3.39	1 = Considerable Surplus

NUMBER OF PROJECTED RETIREMENTS 2002-07:

Respondents were asked to identify the number of eligible retirees for 2002-07 by field. Table 5 summarizes those fields in rank order. Eligibility to retire does not always equate to the number of actual retirements. In addition, at the time of this report, the potential as well as actual impact of the retire/rehire legislation is not known.

The total number of teachers listed is 5,740 or 11 percent of the 2001-02 teaching force in Washington. In 1998-99, 14 percent of the teachers were identified as eligible to retire in 2000-05.

The total number of principals listed is 397 or 16 percent of the 2001-02 principals in Washington. Seventeen percent are elementary principals and 15 percent are secondary principals. In 1998-99, 20 percent of the principals were identified as eligible to retire in 2000-05.

The total number of superintendents is 91 or 37 percent of the 2001-02 superintendents in Washington. In 1998-99, 36 percent of the superintendents were identified as eligible to retire in 2000-05.

The total number of eligible retirees for all fields are identified in Table 5.

Area	Number
Elementary Education	2,460
Mathematics	406
Special Education	358
Social Studies	298
English	279
English/Language Arts	228
Library Media	228
Science–General	168
History	166
Reading	111
Technology Education	97
Business Education	91
Music–Instrumental	89
Family and Consumer Sciences Education	82
Spanish	77
Early Childhood Special Education	69
Music–Choral	68
Science–Biology	58
Music–General	49
Science–Chemistry	44
English as a Second Language	41
Agriculture Education	38
Science–Physics	33

Table 5

Rank Order of Eligible Retirees 2002–07

Rank Order of Eligible Retirees 2002–07

Area	Number
Bilingual	31
French	31
Marketing Education	28
Early Childhood Education	27
German	24
Science–Earth Science	22
Drama	18
Other	12
Japanese	9
Dance	0
Principal–Elementary	209
Principal–High School	102
Superintendent	91
Principal–Middle School	86
School Counselor	307
School Psychologist	104
Speech Language Pathologist	72
School Nurse	41
Occupational Therapist	28
Physical Therapist	17
School Social Worker	5

FORECASTED NEED FOR EDUCATORS BY FIELD 2002-07:

Respondents were asked to forecast the need for replacement educators based on anticipated retirements/changes during 2002-07. Influencing factors include projected student enrollment, changes in program offerings, changes in community demographics, federal, state, and local funding, etc. To achieve statewide data, district data were aggregated. These same data were disaggregated by county to identify geographic educator needs.

Table 6 identifies the rank order need for teaching areas, for support staff, and for administrators respectively.

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Table 6

A	M
Area	Mean
Special Education	2.31
Mathematics	2.12
Technology Education	1.79
Science–General	1.77
Science–Chemistry	1.75
Early Childhood Special	
Education	1.71
Science–Physics	1.68
Science–Biology	1.67
Music–Instrumental	1.67
Elementary Education	1.66
English as a Second Language	1.59
Science–Earth Science	1.57
Music–Choral	1.56
Library Media	1.55
English/Language Arts	1.52
English	1.51
Spanish	1.50
Business Education	1.50
Reading	1.49
Music–General	1.40
Family & Consumer Sciences Ed.	1.39
Social Studies	1.36
Bilingual	1.25
Visual Arts	1.24
Marketing Education	1.23
History	1.19
Early Childhood Education	1.19
French	1.08
Agriculture Education	1.04
Traffic Safety	0.96
Japanese	0.93
Drama	0.87
German	0.84
Dance	0.31

Rank Order of Forecasted Needs by Field

Area	Mean
School Psychologist	2.02
Speech Language Pathologist	1.84
Physical Therapist	1.84
Occupational Therapist	1.81
School Counselor	1.73
School Nurse	1.62
Principal–High School	1.67
Principal–Middle School	1.67
Principal–Elementary	1.60

- -

1.60

3 = Increasing Need

2 = Considerable Need

1 = Slight Need

Superintendent

0 = No Need

Table 7 identifies counties in which districts identified any of the top eleven considerable or slight shortage teaching areas as an area with forecasted increasing or considerable need for 2002-07.

The percentage of counties forecasting needs for each of the eleven teaching areas is:

Special Education	72%
Mathematics	51%
Science–Chemistry	44%
Science–Physics	38%
Science-Biology	38%
Music–Instrumental	36%
Early Childhood Special Education	33%
Music–Choral	31%
English as a Second Language	28%
Bilingual	18%
Japanese	10%

Table 7

Forecasted Teaching Area Shortages 2002-07 Areas forecasted as increasing or considerable need

Area	County	ESD	Area	County	ESD
SPECIAL	Adams	101	MATHEMATICS	Benton	123
EDUCATION	Benton	123		Chelan	171
	Chelan	171		Clallam	114
	Clallam	114		Clark	112
	Clark	112		Cowlitz	112
	Columbia	123		Douglas	171
	Cowlitz	112		Franklin	123
	Douglas	171		Grant	171
	Franklin	123		Island	189
	Grant	171		King	121
	Grays Harbor	113		Kitsap	114
	Island	189		Kittitas	105
	Jefferson	114		Mason	113
	King	121		Pacific	113
	Kitsap	114		Pend Oreille	101
	Klickitat	112		Pierce	121
	Mason	113		Snohomish	189
	Pacific	113		Walla Walla	123
	Pend Oreille	101		Whatcom	189
	Pierce	121		Yakima	105
	Skamania	112			
	Snohomish	189		onal Service District 101 onal Service District 105	
	Spokane	101		mal Service District 103	
	Thurston	113		onal Service District 113	
	Wahkiakum	112		Educational Service Di	
	Walla Walla	123		ound Educational Service onal Service District 123	
	Whatcom	189		entral Educational Servi	
	Yakima	105		st Educational Service I	

Forecasted Teaching Area Shortages 2002-07 Areas forecasted as increasing or considerable need

Area	County	ESD		Area	County	ESD
SCIENCE-	Benton	123	1	Music-	Asotin	123
PHYSICS	Chelan	171		CHORAL	Benton	123
	Clark	112			Clallam	114
	Cowlitz	112			Clark	112
	Douglas	171			Columbia	123
	Franklin	123			Cowlitz	112
	Grant	171			Douglas	171
	King	121			King	121
	Kitsap	114			Kittitas	105
	Pacific	113			Pend Oreille	101
	Pend Oreille	101			Walla Walla	123
	Pierce	121			Yakima	105
	Walla Walla	123				
	Whatcom	189		JAPANESE	Columbia	123
	Yakima	105		JAFANLOL	Cowlitz	123
			1		Douglas	171
SCIENCE-	Benton	123	1		Whatcom	189
CHEMISTRY	Chelan	123			VIIacom	109
CHEMISTRY	Clark	112		-		104
	Cowlitz	112		ENGLISH AS A	Adams	101
		171		SECOND	Benton	123
	Douglas Franklin	123		LANGUAGE	Chelan	171
		123			Cowlitz	112
	Grant				Douglas	171
	Island	189 121			Franklin	123
	King	114			King	121
	Kitsap Pacific				Pend Oreille	101
	Pend Oreille	113 101			Walla Walla	123
	Pierce				Whatcom	189
		121			Yakima	105
	San Juan	189 123				
	Walla Walla			EARLY	Benton	123
	Whatcom	189		CHILDHOOD	Clallam	114
	Yakima	105		Special	Columbia	123
			1	EDUCATION	Cowlitz	112
Music-	Asotin	123			Franklin	123
INSTRUMENTAL		123			Grant	171
	Clallam	114			King	121
	Clark	112			Kitsap	114
	Columbia	123			Pend Oreille	101
	Cowlitz	112			Walla Walla	123
	Douglas	171			Whatcom	189
	Jefferson	114			Yakima	105
	King	121			Okanogan	171
	Kitsap	114		101 = Education	onal Service District 101	
	Kittitas	105		105 = Educatio	onal Service District 105	
	Pend Oreille	101			onal Service District 112	
	Yakima	105			onal Service District 113 c Educational Service Distr	ict 114
	Okanogan	171			ound Educational Service I	
				123 = Educatio	onal Service District 123	
					entral Educational Service	
				189 = Northwe	est Educational Service Dis	uict 189

Forecasted Teaching Area Shortages 2002-07 Areas forecasted as increasing or considerable need

Area	County	ESD
SCIENCE-	Benton	123
BIOLOGY	Chelan	171
	Clark	112
	Cowlitz	112
	Douglas	171
	Grant	171
	King	121
	Pacific	113
	Pend Oreille	101
	Pierce	121
	San Juan	189
	Snohomish	189
	Whatcom	189
	Yakima	105
	Okanogan	171
BILINGUAL	Benton	123
	Chelan	171
	Franklin	123
	Kittitas	105
	San Juan	189
	Whatcom	189
	Yakima	105

101=Educational Service District 101105=Educational Service District 105

112 = Educational Service District 112

113=Educational Service District 113114=Olympic Educational Service District 114121=Puget Sound Educational Service District123=Educational Service District 123

171 = North Central Educational Service District 171
189 = Northwest Educational Service District 189

Table 8 identifies 2001-02 considerable or slight shortage teaching areas, by county, based on responses from districts in the respective counties. The table also identifies 2002-07 forecasted increasing or considerable need teaching areas by county. These data describe geographic teaching shortage areas.

Table 8

2001-02	2002-07
Special Education	Special Education
Mathematics	
Science–Physics	
Science-Chemistry	
Music-Instrumental	
Music–Choral	
Japanese	
English as a Second Language	English as a Second Language
Early Childhood Special Education	
Science-Biology	
Bilingual	
Special Education	
Science-Chemistry	
Music-Instrumental	Music–Instrumental
Music–Choral	Music–Choral
Science-Biology	
Special Education	Special Education
Mathematics	Mathematics
Science–Physics	Science–Physics
Science-Chemistry	Science–Chemistry
Music-Instrumental	Music–Instrumental
Music–Choral	Music–Choral
Japanese	
English as a Second Language	English as a Second Language
Early Childhood Special Education	Early Childhood Special Education
Science-Biology	Science–Biology
Bilingual	Bilingual
Special Education	Special Education
Mathematics	Mathematics
Science–Physics	Science–Physics
	Science–Chemistry
Music-Instrumental	
Music-Choral	
lananese	
Japanese	
English as a Second Language	English as a Second Language
	English as a Second Language
English as a Second Language	English as a Second Language Science–Biology
	Special Education Mathematics Science–Physics Science–Chemistry Music–Instrumental Music–Choral Japanese English as a Second Language Early Childhood Special Education Science–Biology Bilingual Special Education Science–Physics Science–Chemistry Music–Instrumental Music–Choral Science–Biology Special Education Mathematics Science–Chemistry Music–Instrumental Music–Choral Science–Chemistry Music–Instrumental Music–Choral Japanese English as a Second Language Early Childhood Special Education Science–Biology Bilingual Special Education Mathematics Science–Chemistry Music–Instrumental Music–Choral Japanese English as a Second Language Early Childhood Special Education Science–Biology Bilingual Special Education Mathematics Science–Chemistry Music–Instrumental

Teaching Shortage Areas by County

County	2001-02	2002-07
CLALLAM	Special Education	Special Education
	Mathematics	Mathematics
	Science–Physics	
	Science-Chemistry	
	Music-Instrumental	Music-Instrumental
	Music–Choral	Music-Choral
	Early Childhood Special Education	Early Childhood Special Education
	Science-Biology	
CLARK	Special Education	Special Education
	Mathematics	Mathematics
	Science–Physics	Science–Physics
	Science–Chemistry	Science–Chemistry
	Science–Biology	Science–Biology
		Music-Instrumental
		Music–Choral
COLUMBIA	Special Education	Special Education
	Science–Physics	
	Science–Chemistry	
	Music-Instrumental	Music–Instrumental
	Music–Choral	Music–Choral
		Japanese
		Early Childhood Special Education
COWLITZ	Special Education	Special Education
	Mathematics	Mathematics
	Science–Physics	Science–Physics
	Science–Chemistry	Science–Chemistry
	Music-Instrumental	Music–Instrumental
	Music-Choral	Music–Choral
	Early Childhood Special Education	Early Childhood Special Education
	Science–Biology	Science–Biology
		Japanese
		English as a Second Language
DOUGLAS	Special Education	Special Education
	Mathematics	Mathematics
	Science–Physics	Science–Physics
	Science–Chemistry	Science–Chemistry
	Music–Instrumental	Music–Instrumental
	Music-Choral	Music–Choral
	Early Childhood Special Education	
	Science-Biology	Science–Biology
		Japanese
		English as a Second Language

County	2001-02	2002-07
FERRY	Music–Instrumental	
	Music-Choral	
FRANKLIN	Special Education	Special Education
	Mathematics	Mathematics
	Science–Physics	Science–Physics
	Science–Chemistry	Science–Chemistry
	Music-Instrumental	
	Music–Choral	
	English as a Second Language	English as a Second Language
	Early Childhood Special Education	Early Childhood Special Education
	Bilingual	Bilingual
GARFIELD	No data reported	
GRANT	Special Education	Special Education
	Mathematics	Mathematics
	Music-Instrumental	Music-Instrumental
	Music–Choral	
	English as a Second Language	
	Early Childhood Special Education	Early Childhood Special Education
	Science-Biology	Science–Biology
	Bilingual	
		Science–Physics Science–Chemistry
GRAYS	Special Education	
Harbor	Mathematics	
	Science–Physics	
	Science–Chemistry	
	Music–Instrumental	
	Music–Choral	
	Japanese	
	English as a Second Language	
	Early Childhood Special Education	
	Science-Biology	
	Bilingual	
ISLAND	Special Education	Special Education
	Mathematics	Mathematics
	Science–Chemistry	Science–Chemistry
	Early Childhood Special Education	
	Science-Biology	
JEFFERSON	Special Education	Special Education
	Music–Instrumental	Music–Instrumental
	Early Childhood Special Education	

County	2001-02	2002-07
KING	Special Education	Special Education
	Mathematics	Mathematics
	Science–Physics	Science–Physics
	Science-Chemistry	Science–Chemistry
	Music–Instrumental	Music–Instrumental
	Japanese	
	English as a Second Language	English as a Second Language
	Early Childhood Special Education	Early Childhood Special Education
	Science-Biology	Science–Biology
		Music-Choral
KITSAP	Music-Choral	
	Science-Biology	
		Special Education
		Mathematics
		Science–Physics
		Science–Chemistry
		Music–Instrumental
		Early Childhood Special Education
KITTITAS	Special Education	
	Science–Physics	
	Science–Chemistry	
	Music-Instrumental	Music-Instrumental
	Music–Choral	Music–Choral
	Japanese	
	Early Childhood Special Education	
	Bilingual	Bilingual
		Mathematics
KLICKITAT	English as a Second Language	
	Bilingual Education	
		Special Education
LEWIS	Special Education	Special Education
	Mathematics	
	Science–Physics	
	Science–Chemistry	
	Music-Instrumental	
	Music-Choral	
	English as a Second Language	
	Science-Biology	

County	2001-02	2002-07
LINCOLN	Special Education Mathematics Science–Chemistry Science–Physics Music–Instrumental Music–Choral Japanese English as a Second Language Science–Biology Bilingual	
Mason	Special Education Mathematics Early Childhood Special Education Bilingual	Special Education Mathematics
Okanogan	Special Education Mathematics Science–Physics Science–Chemistry Music–Instrumental Music–Choral Japanese English as a Second Language Early Childhood Special Education	Music–Instrumental Early Childhood Special Education
Pacific	Science–Biology Bilingual Special Education Mathematics Science–Chemistry Science–Physics Music–Instrumental Music–Choral Early Childhood Special Education Science–Biology Bilingual	Science–Biology Special Education Mathematics Science–Chemistry Science–Physics Science–Biology
Pend Oreille	Special Education Science–Chemistry Science–Physics Music–Instrumental Music–Choral Science–Biology	Special Education Science–Chemistry Science–Physics Music–Instrumental Music–Choral Science–Biology Mathematics English as a Second Language Early Childhood Special Education

County	2001-02	2002-07
PIERCE	Special Education	Special Education
	Mathematics	Mathematics
	Science–Physics	Science–Physics
	Science–Chemistry	Science–Chemistry
	Early Childhood Special Education	
	Science-Biology	Science–Biology
SAN JUAN	Science–Physics	Science–Physics
	Music-Instrumental	
	Music–Choral	
	English as a Second Language	
		Science–Chemistry
		Science–Biology
		Bilingual
SKAGIT	Special Education	
	Mathematics	
	Science–Physics	
	Music–Choral	
	English as a Second Language	
	Science-Biology	
	Bilingual	
Skamania	Mathematics	
	Science-Biology	
		Special Education
SNOHOMISH	Special Education	Special Education
	Mathematics	Mathematics
	Science-Physics	
	Science–Chemistry	
	Japanese	
	English as a Second Language	
	Early Childhood Special Education	
	Science-Biology	Science–Biology
	Bilingual	
SPOKANE	Special Education	Special Education
	Japanese	
	Early Childhood Special Education	
STEVENS	Special Education	
	Music-Instrumental	
	Music–Choral	

County	2001-02	2002-07
THURSTON	Special Education	Special Education
	Mathematics	<u>.</u>
	Science–Physics	
	Science-Chemistry	
	Music–Instrumental	
	Music–Choral	
	Japanese	
	Early Childhood Special Education	
	Science-Biology	
WAHKIAKUM	Special Education	Special Education
WALLA	Special Education	Special Education
Walla	Science–Physics	Science–Physics
	Science-Chemistry	Science–Chemistry
	Music–Choral	Music–Choral
	English as a Second Language	English as a Second Language
	Bilingual	
		Early Childhood Special Education
		Mathematics
WHATCOM	Special Education	Special Education
	Mathematics	Mathematics
	Science–Physics	Science–Physics
	Science-Chemistry	Science–Chemistry
	Music–Instrumental	
	Music–Choral	
	Japanese	Japanese
	English as a Second Language	English as a Second Language
	Early Childhood Special Education	Early Childhood Special Education
	Science–Biology	Science–Biology
	Bilingual	Bilingual
WHITMAN	Special Education	
	Music-Choral	
ΥΑΚΙΜΑ	Special Education	Special Education
	Science–Physics	Science–Physics
	Science-Chemistry	Science-Chemistry
	Music–Instrumental	Music–Instrumental
	Music–Choral	Music–Choral
	Japanese	
	English as a Second Language	English as a Second Language
	Early Childhood Special Education	Early Childhood Special Education
	Science-Biology	Science–Biology
	Bilingual	Bilingual
		Mathematics

Table 9 identifies the top eleven teaching areas with forecasted increasing or considerable need for 2002-07 for each educational service district (ESD). All nine ESDs identified special education, mathematics, physics, and chemistry as high need teaching areas.

ESD	Area
ESD 101	Special Ed Mathematics Science–Physics Science–Chemistry Music–Instrumental Music–Choral English as a Second Language Early Childhood Special Education Science–Biology Bilingual
ESD 105	Special Ed Mathematics Science–Physics Science–Chemistry Music–Instrumental Music- Choral English as a Second Language Early Childhood Special Education Science–Biology Bilingual
ESD 112	Special Ed Mathematics Science–Physics Science–Chemistry Music–Instrumental Music–Choral Japanese English as a Second Language Early Childhood Special Education Science–Biology
ESD 113	Special Ed Mathematics Science–Physics Science–Chemistry Science–Biology

Table 9Forecasted Teaching Area Shortages by ESD

Table 9 (continued)Forecasted Teaching Area Shortages by ESD

ESD	Area
ESD 123	Special Ed Mathematics Science–Physics Science–Chemistry Music–Instrumental Music–Choral Japanese English as a Second Language Early Childhood Special Education Science–Biology Bilingual
North Central ESD 171	Special Ed Math Science–Physics Science–Chemistry Music–Instrumental Music–Choral Japanese English as a Second Language Early Childhood Special Education Science–Biology Bilingual
Northwest ESD 189	Special Ed Mathematics Science–Physics Science–Chemistry Japanese English as a Second Language Early Childhood Special Education Science–Biology Bilingual
Olympic ESD 114	Special Ed Mathematics Science–Physics Science–Chemistry Music–Instrumental Music–Choral Early Childhood Special Education

Table 9 (continued)Forecasted Teaching Area Shortages by ESD

ESD	Area
Puget Sound ESD (121)	Special Ed Mathematics Science–Physics Science–Chemistry Music–Instrumental Music–Choral English as a Second Language
	Early Childhood Special Education

County/ESD Map

The county/ESD map depicts counties/ESDs by location and identifies the 2001-02 teaching area shortages as well as the 2002-07 forecasted high need teaching areas.

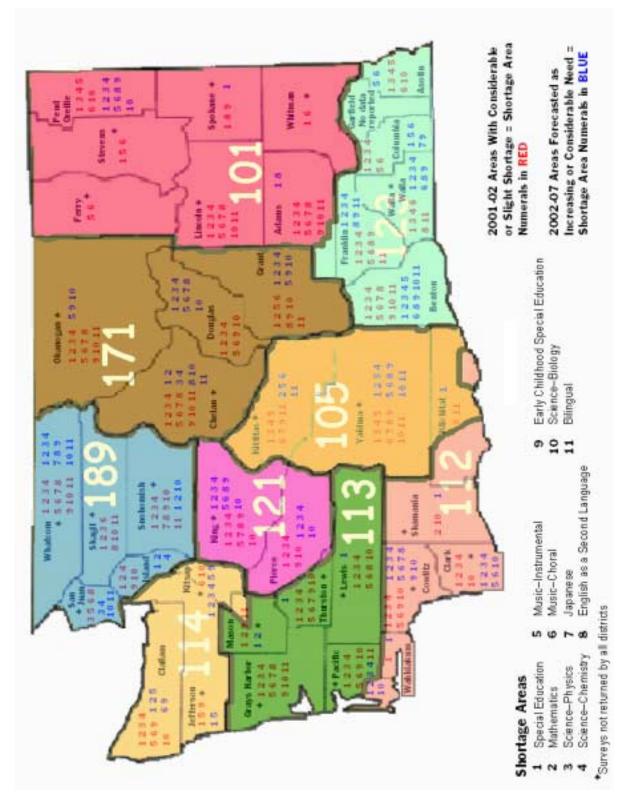


Table 10 identifies all fields identified as considerable or increasing need for 2002-07 for all counties. These data are expanded to include fields beyond the eleven teaching areas described in Table 8 and visually represented on the county/ESD map.

Table 10

District Forecast of All Fields Identified as Considerable or Increasing Need for
2002-07.

County	Field	Mean	Summary
		0.50	
ADAMS	Special Education	2.50	3 teaching areas
	Science–General	2.00	-
	Science–Earth Science	2.00	ļ
	School Psychologist	2.00	2 support areas
	School Nurse	2.00]
ASOTIN	Agriculture Education	3.0	7 teaching areas
	Technology Education	3.0	, v
	Traffic Safety	3.0	
	Business Education	2.00	
	Music–Instrumental	2.00	
	Music-Choral	2.00	
	Music-General	2.00	-
	Occupational Therapist	3.00	5 support areas
	Physical Therapist	3.00	
	Speech Language Pathologist	3.00	
	School Psychologist	2.50	
	Superintendent		
BENTON	Bilingual Education	3.00	19 teaching areas
	Special Education	3.00	
	English as a Second Language	2.67	
	Technology Education	2.50	
	Spanish	2.50	-
	Early Childhood Education	2.33	
	Reading	2.33	
	Mathematics	2.25	1
	Elementary Education	2.00	
	English	2.00	
	English/Language Arts	2.00	
	Library Media	2.00	
	Music–Instrumental	2.00	
	Music-Choral	2.00	
	Music–General	2.00	
	Science-Biology	2.00	
	Science–Chemistry	2.00	
	Science–Earth Science	2.00]
	Science–Physics	2.00]

District Forecast of All Fields Identified as Considerable or Increasing Need for 2002-07.

County	Field	Mean	Summary
	Physical Therapist	2.50	8 support areas
	Speech Language Pathologist	2.50	
	Superintendent	2.50	
	Occupational Therapist	2.33	
	Principal–High School	2.25	
	Principal-Middle School	2.00	
	School Psychologist	2.00	
	Principal–Elementary	2.00	
CHELAN	Bilingual Education	2.50	11 teaching areas
	English as a Second Language	2.00	
	Spanish	2.00	
	Mathematics	2.00	
	Science–General	2.00	
	Science–Biology	2.00	
	Science–Chemistry	2.00	
	Science–Earth Science	2.00	
	Science–Physics	2.00	
	Special Education	2.00	
	Visual Arts	2.00	
	Physical Therapist	2.33	3 support areas
	School Psychologist	2.25	
	Superintendent	2.00	
CLALLAM	Visual Arts	3.00	10 teaching areas
	Mathematics	2.50	
	Special Education	2.33	
	Early Childhood Special Education	2.00	
	English	2.00	
	English/Language Arts	2.00	
	German	2.00	
	Music-Instrumental	2.00	
	Music–Choral	2.00	
	Technology Education	2.00	
	School Counselor	2.00	3 support areas
	School Psychologist	2.00	
	Speech Language Pathologist	2.00	
CLARK	English	3.00	21 teaching areas
	Spanish	3.00	
	Music-Instrumental	3.00]
	Music–Choral	3.00	
	Science–Biology	3.00	-
	Science–Chemistry	3.00	
	·		3 – Increasing Need

District Forecast of All Fields Identified as Considerable or Increasing Need for 2002-07.

County	Field	Mean	Summary
	Science–Earth Science	3.00	Т
	Science–Physics	3.00	-
	Technology Education	3.00	
	Visual Arts	3.00	
	Elementary Education	2.67	
	English/Language Arts	2.67	
	Science–General	2.67	•••
	Library Media	2.50	
	Mathematics	2.50	
	Special Education	2.50	
	Business Education	2.00	
	Family & Consumer Sciences Ed.	2.00	
	History	2.00	
	Reading	2.00	
	Social Studies	2.00	
	Principal–Middle School	3.00	5 support areas
	School Counselor	2.67	
	Principal–Elementary	2.67	
	Principal–High School	2.50	
	School Psychologist	2.00	
COLUMBIA	Agriculture Education	3.00	15 teaching areas
	Business Education	3.00	
	Early Childhood Special Education	3.00	
	Spanish	3.00	
	Music–Instrumental	3.00	
	Music–Instrumental Music–Choral	3.00 3.00	
			-
	Music-Choral	3.00	-
	Music–Choral Music–General	3.00 3.00	• • •
	Music–Choral Music–General Special Education	3.00 3.00 3.00	
	Music–Choral Music–General Special Education Technology Education	3.00 3.00 3.00 3.00	
	Music–Choral Music–General Special Education Technology Education Visual Arts	3.00 3.00 3.00 3.00 3.00 3.00	• • • • • • • • • • • • • • • • • • •
	Music–Choral Music–General Special Education Technology Education Visual Arts Family & Consumer Sciences Ed.	3.00 3.00 3.00 3.00 3.00 2.00	• • • • • • • • • • • • • • • • • • •
	Music–Choral Music–General Special Education Technology Education Visual Arts Family & Consumer Sciences Ed. French	3.00 3.00 3.00 3.00 2.00 2.00 2.00	• • • • • • • • • • • • • • • • • • •
	Music–Choral Music–General Special Education Technology Education Visual Arts Family & Consumer Sciences Ed. French German	3.00 3.00 3.00 3.00 2.00 2.00 2.00	• • • • • • • • • • • • • • • • • • •
	Music–Choral Music–General Special Education Technology Education Visual Arts Family & Consumer Sciences Ed. French German Japanese	3.00 3.00 3.00 3.00 2.00 2.00 2.00 2.00	10 support areas
	Music–Choral Music–General Special Education Technology Education Visual Arts Family & Consumer Sciences Ed. French German Japanese Traffic Safety	3.00 3.00 3.00 3.00 2.00 2.00 2.00 2.00	10 support areas
	Music-Choral Music-General Special Education Technology Education Visual Arts Family & Consumer Sciences Ed. French German Japanese Traffic Safety School Counselor	3.00 3.00 3.00 3.00 2.00 2.00 2.00 2.00	10 support areas
	Music-ChoralMusic-GeneralSpecial EducationTechnology EducationVisual ArtsFamily & Consumer Sciences Ed.FrenchGermanJapaneseTraffic SafetySchool CounselorSchool Psychologist	3.00 3.00 3.00 2.00 2.00 2.00 2.00 2.00	10 support areas
	Music-ChoralMusic-GeneralSpecial EducationTechnology EducationVisual ArtsFamily & Consumer Sciences Ed.FrenchGermanJapaneseTraffic SafetySchool CounselorSchool PsychologistOccupational Therapist	3.00 3.00 3.00 2.00 2.00 2.00 2.00 2.00	10 support areas
	Music-Choral Music-General Special Education Technology Education Visual Arts Family & Consumer Sciences Ed. French German Japanese Traffic Safety School Counselor School Psychologist Occupational Therapist Physical Therapist	3.00 3.00 3.00 3.00 2.00 2.00 2.00 2.00 2.00 3.00 3.00 3.00 3.00	10 support areas

District Forecast of All Fields Identified as Considerable or Increasing Need for 2002-07.

County	Field	Mean	Summary
	School Nurse	2.00	-1
	Principal-Middle School	2.00	
	Principal-Elementary	2.00	
	F fincipal-Liementary	2.00	
COWLITZ	Special Education	3.00	26 teaching areas
	Mathematics	2.50	
	Science–General	2.50	
	Science–Biology	2.50	
	Science–Chemistry	2.50	
	Science–Earth Science	2.50	
	Science–Physics	2.50	-
	English/Language Arts	2.33	-
	Spanish	2.33	-
	English	2.25	
	Agriculture Education	2.00	
	Bilingual Education	2.00	
	Business Education	2.00	
	Drama	2.00	
	Early Childhood Special Education	2.00	
	English as a Second Language	2.00	
	Family & Consumer Sciences Ed.	2.00	
	French	2.00	
	Japanese	2.00	
	History	2.00	
	Library Media	2.00	
	Marketing Education	2.00	
	Music–Instrumental	2.00	
	Music-Choral	2.00	
	Music–General	2.00	
	Social Studies	2.00	
	School Counselor	2.50	8 support areas
	Occupational Therapist	2.00	
	Speech Language Pathologist	2.00	
	School Nurse	2.00	
	Principal–Elementary	2.00	
	Principal-Middle School	2.00	-
	Principal–High School	2.00	-
	Superintendent	2.00	
Douotte	Taskaslam, Education	0.75	_] 10 to och imm om och
DOUGLAS	Technology Education	2.75	19 teaching areas
	Special Education	2.50	
	Music–Instrumental	2.50	
	Music–Choral	2.50	l

District Forecast of All Fields Identified as Considerable or Increasing Need for
2002-07.

County	Field	Mean	Summary
	Music–General	2.50	-T
	Reading	2.33	
	Science–General	2.25	
	Elementary Education	2.00	
	English as a Second Language	2.00	
	French	2.00	
	German	2.00	
	Japanese	2.00	
	Spanish	2.00	
	Mathematics	2.00	
	Science–Biology	2.00	-
	Science–Chemistry	2.00	-
	Science–Earth Science	2.00	
	Science–Physics	2.00	
	Social Studies	2.00	-
	School Psychologist	2.50	7 support areas
	School Counselor	2.33	
	Speech Language Pathologist	2.33	
	Occupational Therapist	2.00	
	Physical Therapist	2.00	
	School Nurse	2.00	
	Superintendent	2.00	
RRY	No areas rated 2.00 or above]
RANKLIN	English as a Second Language	3.00	10 teaching areas
	Mathematics	3.00	
	Technology Education	3.00	
	Special Education	3.00	
	Science-Physics	3.00	
	Bilingual Education	2.50	
	Science–Chemistry	2.50	
	Library Media	2.00	
	Reading	2.00	
	Science–Earth Science	2.00	
	School Counselor	2.00	3 support areas
	School Counselor Occupational Therapist	2.00	3 support areas
			3 support areas
RANKLIN	Occupational Therapist	2.00	
RANKLIN	Occupational Therapist Principal–High School	2.00 2.00	
FRANKLIN	Occupational Therapist Principal–High School English as a Second Language	2.00 2.00 3.00	
RANKLIN	Occupational Therapist Principal–High School English as a Second Language Mathematics	2.00 2.00 3.00 3.00	10 teaching areas

District Forecast of All Fields Identified as Considerable or Increasing Need for 2002-07.

County	Field	Mean	Summary
	Pilingual Education	2 50	т <u></u> т
	Bilingual Education	2.50 2.50	-
	Science–Chemistry		
	Library Media	2.00	-
	Reading Science–Earth Science	2.00	-
		2.00]
	School Counselor	2.00	3 support areas
	Occupational Therapist	2.00	
	Principal–High School	2.00]
GARFIELD	No data reported]
GRANT	Science-Chemistry	3.00	11 teaching areas
	Science-Biology	2.67	
	Science–General	2.67	
	Science–Earth Science	2.50	
	Science–Physics	2.50	
	Special Education	2.40	
	Mathematics	2.33	
	Music-Instrumental	2.33	
	Business Education	2.00	
	Early Childhood Special Education	2.00	
	Technology Education	2.00	
	School Psychologist	3.00	4 support areas
	Occupational Therapist	3.00	
	Physical Therapist	3.00	
	Speech Language Pathologist	2.75	
GRAYS HARBOR	Business Education	2.00	1 teaching area
			0 support areas
ISLAND	Library Media	3.00	11 teaching areas
	Science-Chemistry	3.00	
	Special Education	3.00	
	Mathematics	2.50	
	Technology Education	2.50	
	French	2.00	•
	Spanish	2.00	•
	History	2.00	-
	Marketing Education	2.00	1
	Music–Instrumental	2.00	1
	Traffic Safety	2.00	
	Occupational Therapist	3.00	9 support areas
	Physical Therapist	3.00	1

District Forecast of All Fields Identified as Considerable or Increasing Need for 2002-07.

County	Field	Mean	Summary
	School Nurse	3.00	Т
		3.00	-
	Principal–High School School Counselor	2.00	
	School Psychologist	2.00	
	Speech Language Pathologist	2.00	-
	Principal–Middle School	2.00	-
	Superintendent	2.00	-
	Superintendent	2.00	_
JEFFERSON	Special Education	2.67	3 teaching areas
	Library Media	2.00	
	Music-Instrumental	2.00	
			0 support areas
King	Special Education	2.67	13 teaching areas
	Mathematics	2.58	, v
	Science–General	2.35	
	Science-Chemistry	2.27	
	Science–Physics	2.23	
	English as a Second Language	2.20	
	Science-Biology	2.20	
	Early Childhood Special Education	2.00	
	Science–Earth Science	2.00	
	Technology Education	2.18	
	Library Media	2.17	
	Music-Choral	2.07	
	Music-Instrumental	2.06	
	School Psychologist	2.29	9 support areas
	Principal-Elementary	2.28	
	Occupational Therapist	2.27	
	Principal–High School	2.25	
	Principal–Middle School	2.24	
	Speech Language Pathologist	2.22	
	School Counselor	2.21	
	Physical Therapist	2.14	
	School Nurse	2.13]
KITSAP	Special Education	2.8	11 teaching areas
	Mathematics	2.40	
	Music-Instrumental	2.20	
	Science–General	2.20	
	Science-Chemistry	2.20	
	Early Childhood Special Education	2.20	
	Elementary Education	2.20	1

District Forecast of All Fields Identified as Considerable or Increasing Need for 2002-07.

County	Field	Mean	Summary
	Reading	2.00	
	Science-Physics	2.00	
	Technology Education	2.00	
	English/Language Arts	2.00	
	School Psychologist	2.8	9 support areas
	Physical Therapist	2.8	
	Speech Language Pathologist	2.6	
	Principal-Elementary	2.50	
	Principal-Middle School	2.40	
	Principal–High School	2.40	
	School Counselor	2.20	
	Occupational Therapist	2.20	-
	Superintendent	2.00	
KITTITAS	Bilingual Education	3.00	8 teaching areas
	French	3.00	
	German	3.00	-
	Marketing Education	3.00	-
	Mathematics	2.67	
	Music-Instrumental	2.00	
	Music-Choral	2.00	
	Music–General	2.00	
			0 support areas
KLICKITAT	Special Education	2.33	1 teaching area
			0 support areas
Lewis	Special Education	2.17	2 teaching areas
	English as a Second Language	2.00	
			0 support areas
LINCOLN			0 teaching areas
			0 support areas
Mason	Mathematics	2.50	8 teaching areas
MASON	Special Education	2.30	
	Technology Education	2.00	
	Business Education	2.00	
	Agriculture Education	2.00	-
	Early Childhood Education	2.00	-1
	Elementary Education	2.00	
	Science–Earth Science	2.00	
	Principal–High School	3.00	8 support areas

District Forecast of All Fields Identified as Considerable or Increasing Need for 2002-07.

County	Field	Mean	Summary
	Superintendent	2.75	TT
	School Psychologist	2.75	-
	School Nurse	2.25	-
	Principal–Elementary	2.25	-
	Principal-Middle School	2.25	-
	Speech Language Pathologist	2.00	•
	Occupational Therapist	2.00	•
		2.00	
OKANOGAN	Music–General	2.50	8 teaching areas
	Technology Education	2.33	-
	Early Childhood Special Education	2.33	-
	Family & Consumer Sciences Ed.	2.25	-
	Library Media	2.25	_
	Science–Biology	2.00	-
	Traffic Safety	2.00	_
	Marketing Education	2.00	
	Principal–High School	2.67	5 support areas
	Principal–Middle School	2.50	
	School Psychologist	2.50	-
	Social Worker	2.50	-
	Occupational Therapist	2.00]
PACIFIC	Family & Consumer Sciences Ed.	3.00	11 teaching areas
	Mathematics	3.00	
	Business Education	2.50	
	English	2.50	-
	Science–Earth Science	2.50	
	Traffic Safety	2.00	-
	Special Education	2.00	-
	Science–Physics	2.00	-
	Science–Chemistry	2.00	-
	Science–Biology	2.00	-
	Science–General	2.00	-
	Superintendent	2.25	4 support areas
	School Psychologist	2.00	_
	Occupational Therapist	2.00	-
	Physical Therapist	2.00	-
PEND OREILLE	Library Media	2.50	27 teaching areas
	Special Education	2.50	
	Technology Education	2.50	-
	Visual Arts	2.50	1
	Business Education	2.00	-
		2.00	.1

District Forecast of All Fields Identified as Considerable or Increasing Need for
2002-07.

County	Field	Mean	Summary
	Early Childhood Education	2.00	-1
	Early Childhood Special Education	2.00	-
	Elementary Education	2.00	
	English	2.00	
	English/Language Arts	2.00	
	English as a Second Language	2.00	
	Family & Consumer Sciences Ed.	2.00	-
	Spanish	2.00	-
	History	2.00	
	Marketing Education	2.00	-
	Mathematics	2.00	-
	Music-Instrumental	2.00	-
	Music–Choral	2.00	
	Music–General	2.00	
	Reading	2.00	
	Science–General	2.00	
	Science-Biology	2.00	-
	Science–Chemistry	2.00	
	Science–Earth Science	2.00	
	Science–Physics	2.00	
	Social Studies	2.00	
	Traffic Safety	2.00	
	Superintendent	2.50	10 support areas
	Principal–Elementary	2.50	
	Principal-Middle School	2.50	-
	Principal–High School	2.50	
	School Nurse	2.00	-
	Social Worker	2.00	-
	School Counselor	2.00	-
	School Psychologist	2.00	
	Occupational Therapist	2.00	
	Physical Therapist	2.00	
PIERCE	Special Education	2.67	10 teaching areas
	Science-Biology	2.38	
	Mathematics	2.38	
	Science–Chemistry	2.30	-
	Science–Physics	2.18	
	Elementary Education	2.13	-
	English/Language Arts	2.13	
	Science–General	2.00	
	Science–Earth Science	2.00	-
	Technology Education	2.00	

District Forecast of All Fields Identified as Considerable or Increasing Need for 2002-07.

County	Field	Mean	Summary
	School Psychologist	2.64	7 support areas
	Speech Language Pathologist	2.55	
	Occupational Therapist	2.44	-
	Physical Therapist	2.44	-
	School Nurse	2.27	-
	Principal-Middle School	2.00	-
	School Counselor	2.18	-
San Juan	Science–Physics	3.00	12 teaching areas
0/11/00/11	English/Language Arts	2.50	
	History	2.50	-
	Science–Chemistry	2.50	-
	Bilingual Education	2.00	
	Drama	2.00	
	Spanish	2.00	-
	Music–General	2.00	-
	Reading	2.00	
	Science–General	2.00	-
	Science–Biology	2.00	
	Visual Arts	2.00	-
	School Psychologist	3.00	3 support areas
	Principal–High School	3.00	
	Principal–Elementary	2.50]
Skagit	Mathematics	3.00	10 teaching areas
	Business Education	2.50	
	Bilingual Education	2.33	
	Special Education	2.33	
	Elementary Education	2.00	
	English	2.00	
	English/Language Arts	2.00	
	English as a Second Language	2.00	
	Science–General	2.00	
	Technology Education	2.00	
	Superintendent	2.25	3 support areas
	School Nurse	2.00	
	School Psychologist	2.00	
Skamania	Special Education	2.00	3 teaching areas
	French	2.00	
	Business Education	2.00	
	Superintendent	2.00	1 support area
SNOHOMISH	Special Education	2.89	6 teaching areas

District Forecast of All Fields Identified as Considerable or Increasing Need for 2002-07.

County	Field	Mean	Summary
	Elementary Education	2 42	Т
	Elementary Education Mathematics	2.42	
	Reading	2.00	
	Science-Biology	2.00	
	Science–Biology Science–Earth Science	2.00	
]
	Occupational Therapist	2.50	4 support areas
	Physical Therapist	2.50	
	School Psychologist	2.40	
	Speech Language Pathologist	2.13]
SPOKANE	Special Education	2.50	2 teaching areas
	Mathematics	2.17	
			0 support areas
STEVENS			0 teaching areas
			0 support areas
THURSTON	Special Education	2.33	3 teaching areas
	Elementary Education	2.17	-
	Early Childhood Special Education	2.00	-
	School Nurse	3.00	7 support areas
	Physical Therapist	3.00	
	Occupational Therapist	2.50	
	School Counselor	2.00	
	School Psychologist	2.00	
	Speech Language Pathologist	2.00	
	Superintendent	2.00	
WAHKIAKUM	Special Education	2.00	10 teaching areas
	Technology Education	2.00	
	Traffic Safety	2.00	
	Agriculture Education	2.00	
	Business Education	2.00	
	Early Childhood Education	2.00	
	Elementary Education	2.00	
	English	2.00	
	English/Language Arts	2.00	
	Spanish	2.00	
	School Nurse	2.00	5 support areas
	Principal-Elementary	2.00	
	Principal-Middle School	2.00	
	Principal–High School	2.00	
	Superintendent	2.00]

District Forecast of All Fields Identified as Considerable or Increasing Need for	
2002-07.	

County	Field	Mean	Summary
Walla Walla	Music-Choral	3.00	13 teaching areas
VVALLA VVALLA	Science–Biology	3.00	15 leaching areas
	Science-Chemistry	3.00	
	Science–Earth Science	3.00	
	Science–Physics	3.00	
	Special Education	3.00	
	Mathematics	2.50	
	Science–General	2.33	
	Technology Education	2.33	
	Early Childhood Education	2.00	
	Early Childhood Special Education	2.00	
	English/Language Arts	2.00	
	Music–General	2.00	
	School Psychologist	3.00	8 support areas
	Speech Language Pathologist	3.00	
	Principal-Middle School	3.00	1
	Principal–High School	3.00	
	Occupational Therapist	2.00	
	Physical Therapist	2.00	
	School Nurse	2.00	
	Principal-Elementary	2.00	
WHATCOM	Mathematics	2.75	20 teaching areas
	Special Education	2.50	
	Agriculture Education	2.50	
	Spanish	2.33	
	Bilingual Education	2.00	
	Business Education	2.00	
	Early Childhood Special Education	2.00	
	English	2.00	
	English/Language Arts	2.00	
	English as a Second Language	2.00	
	Family & Consumer Sciences Ed.	2.00	
	French	2.00	
	German	2.00	
	Japanese	2.00	
	Reading	2.00	
	Science–Biology	2.00	
	Science–Chemistry	2.00	
	Science–Earth Science	2.00	
	Science–Physics	2.00	
	Technology Education	2.00	J

District Forecast of All Fields Identified as Considerable or Increasing Need for 2002-07.

County	Field	Mean	Summary
	School Psychologist	2.50	7 support areas
	Speech Language Pathologist	2.33	-
	Principal–High School	2.25	
	School Nurse	2.00	
	Principal–Elementary	2.00	
	Principal–Middle School	2.00	
	Superintendent	2.00	
WHITMAN			0 teaching areas
VVHITMAN			
			0 support areas
Υακιμα	English as a Second Language	2.80	22 teaching areas
	Early Childhood Special Education	2.80	
	Spanish	2.60	
	Marketing Education	2.50	
	Science–General	2.43	
	Music–General	2.33	
	Special Education	2.33	
	Bilingual Education	2.33	
	Elementary Education	2.30	
	Early Childhood Education	2.25	-
	Science-Biology	2.25	
	Science–Earth Science	2.25	
	Science–Physics	2.25	
	Mathematics	2.22	
	Music-Instrumental	2.17	
	Library Media	2.14	
	English	2.13	
	Science–Chemistry	2.00	
	Business Education	2.00	
	English/Language Arts	2.00	
	Music–Choral	2.00	
	Social Studies	2.00	
	School Counselor	2.22	5 support areas
	Superintendent	2.17	
	School Psychologist	2.00	
	Speech Language Pathologist	2.00	-
	School Nurse	2.00	-

Factors Impacting Supply and Demand for New Teachers:

Respondents were asked to respond to a standardized list of factors used on the AAEE national survey. Respondents rated their perception as to how the factors impacted the number of new educators hired in 2001-2002. Table 11 documents the mean score for all responses.

Table 11

Administrators' Perceptions of Factors Influencing the Number of New Educators
Hired in 2001-02.

	Mean	
Federal Funding	3.31	
State Funding	3.38	
Local Funding	3.38	
Postponed Retirement	3.07	
Routine Retirement	3.23	
Early Retirement	3.02	
State Mandates	2.86	
Federal Mandates	2.81	
Limited English-Proficient Students	3.05	
Shifts of Teachers	2.93	
Shifts of Students	2.83	
Student Enrollment	2.88	
Private/Home School	2.71	
Class Size	3.42	5
Military Demobilization	2.99	э 4
Changing Teacher Education Enrollments in Colleges	2.79	3
Mobility of New Graduates	3.00	1
Mobility of Experienced Educators	3.04	

5 = a significant positive influence 4 = a moderate positive influence	
 a moderate positive influence a no influence a moderate negative influence 	`
1 = a significant negative influence	

Summary

- 1. Washington is experiencing a teacher shortage in very specific areas, most notably special education, mathematics, and physics. These shortage areas span all nine educational service districts (ESDs).
- 2. While all counties report shortages among the top eleven teaching areas identified as considerable or some shortage, these shortages vary geographically.
- 3. Geographic variation exists for the need for support personnel (i.e., principals, related service providers) as well.
- 4. The predicted percentages of eligible retirees are slightly lower than the percentages identified in the 2000 Supply/Demand Report for teachers, support personnel, and principals. The percentage for superintendent retirees increased from 36 to 37 percent.
- 5. The data do not reflect actual "numbers" of educators required to meet the field demand. Numbers are reported for actual 2001-02 vacancies.
- The rank order for total number of the top eleven 2002-07 forecasted increasing or considerable need teaching areas for counties within an ESD are:

ESD	Total Number of Top Eleven Shortage Teaching Areas
Educational Service District 123 North Central Educational Service District 171 Educational Service District 112 Northwest Educational Service District 189 Educational Service District 105 Puget Sound Educational Service District 114 Olympic Educational Service District 114 Educational Service District 101 Educational Service District 113	