Approved	February	5,	1990
P-			)ate

MINUTES OF THE SENATE COMMITTEE C	ON	EDUCATI	ON .
The meeting was called to order by	SENATOR	JOSEPH C Chairperso	C. HARDER at
1:30 XXX/p.m. onTuesday, Janua	ry 30	, 199	10 in room <u>123-S</u> of the Capitol.

Committee staff present:

All members were present except:

Mr. Ben Barrett, Legislative Research Department

Ms. Avis Swartzman, Revisor's Office

Mr. Dale Dennis, Assistant Commissioner of Education

Mrs. Millie Randell, Committee Secretary

Conferees appearing before the committee:

Dr. Jack Skillett, Dean, The Teachers College, Emporia State University
Report on: "Teacher Supply and Demand"

Following a call to order by Chairman Joseph C. Harder, the Chairman recognized Dr. Jack Skillett, dean of The Teachers College, Emporia State University. Dr. Skillett preceded his report on "Kansas Teacher Supply and Demand" by calling the Committee's attention to three documents which, he announced, were being released today and which had been distributed to members of the Committee. These documents are: Attachment 1, Eleventh Annual Survey, Teacher Supply and Demand in Kansas Public Schools; Attachment 2, Number of Teachers Prepared in Kansas Higher Education Institutions, a Special Report; and Attachment 3, A Special Report on Kansas Teacher Supply and Demand.

Dr. Skillett introduced to the committee a colleague of his in The Teachers College, Dr. Bill Scofield, who assisted Dr. Skillett in the preparation of the documents found in Attachments 2 and 3.

Dr. Skillett called the Committee's attention to Attachment 3, A Special Report on Teacher Supply and Demand, and pointed out highlights in this and then other documents. Dr. Skillett reported that in 1989 Kansas had experienced a 5.4% increase in teachers being prepared in both the Regents institutions and the private schools but said this is a 55% decrease from those being prepared in 1972. He informed members that there had been an 18.2% increase in teacher preparatory students over the last three years when there had, also, been a rather substantial increase in standards for entrants into the teacher preparation programs. He commented that even higher teacher preparatory standards are being considered.

Responding to a question, Dr. Skillett reported that teacher preparatory students are among the brightest and noted that two of the top students in the December, 1989 E.S.U. graduating class were teacher graduates. Dr. Skillett emphasized the importance of longitudinal studies as an aid in helping to forecast trends.

Dr. Skillett was asked his opinion on the relative merits of SB 459. In his reply, he wanted it clearly understood that he was speaking for himself and not for the university. Dr. Skillett encouraged the Committee to go forward with SB 459 but expressed two concerns regarding the bill:

1) The importance of a broad-based educational background for students, and 2) the importance of maintaining the rigor and excellence of college credit courses.

The Chair announced that Committee discussion and/or action on SB 459 would be continued at a later time.

When the Chair asked the Committee's pleasure regarding the minutes of Unless specifically noted, the individual remarks recorded herein have not been transcribed verbatim. Individual remarks as reported herein have not

Unless specifically noted, the individual remarks recorded neight have not been transcribed verbatim. Individual remarks as reported herein have not been submitted to the individuals appearing before the committee for editing or corrections.

Page  $\underline{1}$  of  $\underline{2}$ 

#### CONTINUATION SHEET

MINUTES OF THE _	SENATE C	OMMITTEE	E ON	EDI	UCATI	ON		
room 123-S, Stateho	ouse, at1:30		on Tueso	lay, Ja	anuar	ту 30		, 19 <sup>90</sup>
the January 2								
the motion tha	at minutes o	f Januar	y 25 be	appro	ved.	The mot	ion car	rried.
The Chair adjo	ourned the m	eeting.						

#### SENATE EDUCATION COMMITTEE

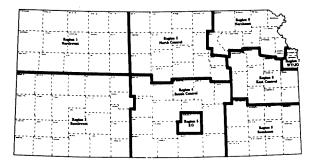
TIME:	1:30 p.m.	PLACE:	123-S	DATE:	Tuesday,	Jan.	30, 19	90
		_						

#### GUEST LIST

NAME	<u>ADDRESS</u>		ORGANIZATION
Tracy Le Master	Box 7	Burlington	
Dollie Darton	405 Juniatta	$\mathcal{O}$	
Dan Seeberger	Harrow	, 0	BMOK
Jorge A. Lazano	130 9 SW	Topeka Blud,	Hispania Affairs
Thomasyg	Paal		J Q E
BILL SCOFIELD	1212 W.18	3 H EMPORIA	EMP.ST. UNIU,
Chuck Stuart	Topeka	1	U.S.A.
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Bill Mosele	Lawrence	2	A.S.K.
Davi Anna Brown	Topek	(	175/C
Douglas H Dean	/	x5, Chetopa	USD 505
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David Monical	Tir		Washbum UNIV.
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## Eleventh Annual Survey

## Teacher Supply And Demand In Kansas Public Schools



# Jones Institute For Educational Excellence The Teachers College Emporia State University

January, 1990

## TEACHER SUPPLY AND DEMAND IN KANSAS PUBLIC SCHOOLS

**Eleventh Annual Survey** 

Jones Institute for Educational Excellence
The Teachers College
Emporia State University

Jack D. Skillett, Dean The Teachers College

Bruce A. Milford, Research Associate

January, 1990

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Emporia State University Press Emporia, Kansas January, 1990

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**4** 

#### Section 1

#### Introduction

In the fall of 1979, the College of Education of Emporia State University conducted the first of what has become an annual study of teacher supply and demand in Kansas. The original study was made due to (1) an indication in literature that an apparent teacher shortage existed, (2) repeated inquiries from practicing administrators in the state of Kansas concerning the non-availability of candidates for teaching positions, and (3) the lack of a data base in the state of Kansas to establish a foundation for longitudinal research purposes.

This study, which is the tenth annual teacher supply study conducted by The Teachers College, is patterned after the original study of 1979.

Moreover, the research format outlined on the ensuing pages focuses on questions similar to the questions addressed in the study. Specifically, these questions were:

- 1) Do we have an adequate supply of teachers in Kansas?
- 2) What teaching areas will provide graduates the greatest employment opportunities?
- 3) What teaching areas will provide the least employment opportunities?
- 4) To what extent do we have a surplus and/or shortage of teachers in the various geographical regions of Kansas?
- 5) Do employment opportunities vary due to the size of school districts in Kansas?

All of these questions and others were addressed in this study.

Initial funding for this project was provided by a grant awarded to the author/researcher by the Research and Creativity Committee at Emporia State University. Moreover, the Kansas State Department of Education provided data in the area of special education which greatly enhanced the data base for this study. Also, Commissioner Droegemueller deserves special recognition for his willingness to provide supplemental funding.

#### Section 2

#### **Research Procedures Employed**

The procedures employed to collect data and establish discernible trends in teacher supply and demand in the state of Kansas were as follows:

#### **Collection of Data - Non-Special Education**

- A multi-faceted questionnaire was designed to elicit information pertaining to (a) the actual number of vacancies in Kansas as of September 5, 1989, and (b) the perceived teacher supply. (See Appendix for a copy of the questionnaire.)
- 2) The questionnaire was prepared, reviewed, and modified by four members of the faculty at Emporia State University and sent to Kansas unified school district superintendents.
- 3) A letter explaining the purpose of the study and a self-addressed return envelope were included to encourage a high percentage of responses. (See Appendix for letter.)
- 4) Upon receipt of approximately 77 percent of the returns, nonrespondents were surveyed via a personal telephone interview.
- 5) Usable returns were received from all 304 Unified School Districts.

  The author attributes this perfect return to high levels of interest among the superintendents of schools in the state of Kansas and to the credibility the study has acquired during its first ten years.

#### **Collection of Data - Special Education**

- A multi-faceted questionnaire was designed to solicit information pertaining to the actual number of vacancies as of September 5,
   1989. Respondents were also asked to report only vacant positions not included in any special education cooperative.
- 2) Data pertaining to special education cooperative vacancies were compiled from the Kansas Department of Education special education vacancy report completed by all special education cooperatives in the state of Kansas.

#### **Analysis of Data**

- 1) Data were organized for processing to elicit (a) the number of vacancies and perceived supply of teachers by geographic region and (b) the number of vacancies and perceived teacher supply by size of school district.
- 2) Nine geographic regions in the state of Kansas were determined after consultation with colleagues on the Emporia State University campus. The nine geographic areas identified were: (See Appendix for specific boundaries for each regional area.)
  - (1) Northwest
  - (2) Southwest
  - (3) North Central
  - (4) South Central
  - (5) Sedgwick County (SEDG)
  - (6) Northeast
  - (7) Wyandotte/Johnson Counties (WY/JO)
  - (8) East Central
  - (9) Southeast

Home county designation as determined by the State Department of Education was utilized for assignment to the appropriate region.

3) All respondents were divided into three pre-designated school district enrollment groups. The enrollment groups were:

<u>Enrollment</u>	Size of School Designation
0-399	(1)
400-1,499	(2)
1,500-over	(3)

- 4) Data were processed by the Emporia State University data processing center.
- 5) Data runs were made to determine (a) the number of reported vacancies by teaching areas, size of school districts, and region, and (b) perceived supply of candidates by teaching areas, size of school district, and region.
- 6) Numerical values and their associated definitions were:
  - (1) serious shortage
  - (2) slight shortage
  - (3) adequate supply
  - (4) slight surplus
  - (5) considerable surplus
- 7) Data were tabled and mean averages determined in the following categories:
  - (a) Elementary
  - (b) Secondary
  - (c) Administration

Number of vacancies was reported in the following categories:

- (a) Elementary(b) Secondary(c) Administration(d) Special Education

It should be noted that data analyzed in this report represent 100 percent of the unified school districts in the state of Kansas.

#### Section 3

#### **Analysis of Data**

This section is focused on the perceived supply of teaching candidates in each of the designated teaching areas and the number of reported vacancies. Major areas reviewed were: (1) Elementary, (2) Secondary, (3) Special Education, and (4) Administration.

As stated in the questionnaire, respondents were asked to indicate their personal perception of the supply of candidates and the number of vacancies in their district as of September 5, 1989. Respondents were requested not to indicate their opinions on availability of candidates in teaching areas that were not open in their districts for the 1989-90 school year. They were also asked not to report special education vacancies which fall within the budgetary domain of their special education cooperatives.

#### **Data and Related Interpretations - Elementary**

As reflected in Table 1, the mean average pertaining to the perceived teacher supply for all elementary levels in Kansas, excluding special education, was 2.98. This represents an adequate supply for all areas of elementary education. However, the data upon careful perusal indicated that a slight shortage continued to exist in the availability of candidates for (1) counseling, (2) library services, (3) reading, and (4) music. As has been

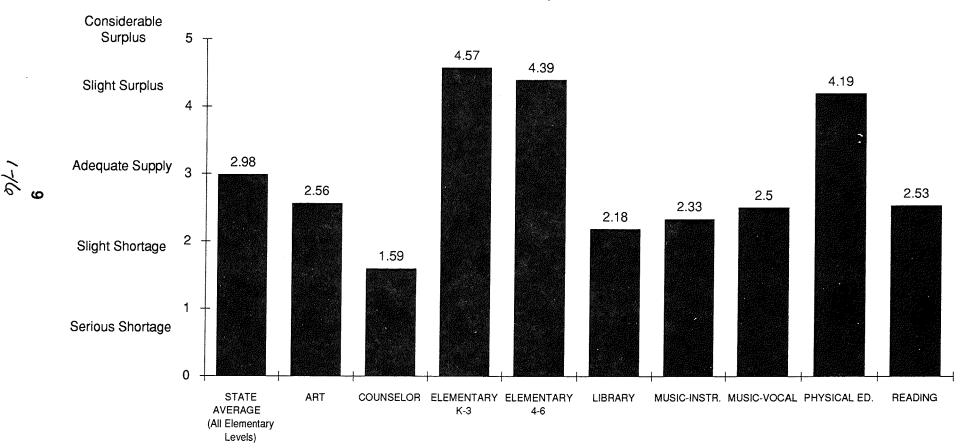
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Table 1

TEACHER SUPPLY AT THE ELEMENTARY LEVEL AS PERCEIVED BY KANSAS SUPERINTENDENTS IN 1989

	STATE OF		_			SIZE OF DISTRICT							
AREA	KANSAS AVERAGE	1 NW	2 SW	3 NC	4 SC	5 SEDG	6 NE	7 WY/JO	8 EC	9 SE	0-399	400-1499	1500-Over
Art	2.56	3.00	2.20	2.00	2.50	2.50	2.80	2.80	2.75	2.67	1.86	2.79	2.65
Counselor	1.59	1.00	1.75	1.00	1.79	1.80	1.33	1.40	1.85	1.45	1.63	1.58	1.59
Elementary K-3	4.57	4.77	4.42	4.38	4.52	3.88	4.67	4.71	4.64	4.70	4.58	4.59	4.53
Elementary 4-6	4.39	4.50	4.08	4.47	4.33	3.50	4.38	4.45	4.43	4.72	4.33	4.46	4.30
Library	2.18	1.50	2.29	2.00	2.10	2.00	1.50	1.50	2.43	3.00	2.00	2.35	2.08
Music - Instr.	2.33	2.00	2.00	2.14	2.33	2.00	2.00	3.00	2.60	3.00	1.77	2.56	2.70
Music - Vocal	2.50	2.00	2.00	2.00	2.36	2.00	2.80	3.40	2.86	3.17	1.92	2.41	3.05
Physical Ed.	4.19	4.75	3.50	4.67	4.17	4.00	4.33	4.67	4.14	4.00	4.09	4.36	4.13
Reading	2.53	2.33	2.00	3.00	2.29	3.00	3.66	2.33	2.60	2.33	2.18	3.15	2.25
Mean Average	2.98	2.87	2.69	2.85	2.93	2.75	3.05	3.14	3.14	3.23	2.71	3.14	3.03

Chart 1
Teacher Supply at the Elementary Level as Perceived by
Kansas Superintendents in 1989



the case since 1979 when the first data were collected, a slight surplus to considerable surplus of candidates was reported to exist in the areas of physical education and elementary education (K-6). A graphic illustration of the data may be found in Chart 1.

Regional data revealed that the most plentiful supply of candidates was reported in the Southeast region of Kansas. Furthermore, respondents in the 400-1,499 enrollment group indicated a slightly greater supply of candidates than did those in the other two enrollment groups.

With regard to the number of elementary vacancies in the state of Kansas, Table 2 shows that a total of 40.65 vacancies existed on September 5, 1989. The greatest number of vacancies was reported in the East Central and Northeast regions of the state. Further investigation of the September 5 regular classroom teacher vacancies in elementary education revealed that those positions were filled during the first three weeks of September. Also, the superintendents reported that a large pool of candidates existed for the positions announced.

#### **Data and Related Interpretations - Secondary**

With regard to teacher supply at the secondary level (7-12), data may be found in Table 3. As may be gleaned from the data, the overall mean average is reported at 2.76, indicating a slight shortage to adequate supply of candidates in the state of Kansas. The teaching areas reported to have the greatest shortage of candidates were (1) foreign languages, (2) computer science, (3) library science, (4) counseling, (5) journalism,

(6) music, and (7) sciences. A surplus was reported in physical education and social science. A graphic illustration of candidate supply in each secondary teaching area may be found in Chart 2.

Regional data depicted in Table 3 reveal that the greatest shortage of candidates existed in the Southwest region. Further, general analysis of the data showed a more plentiful supply of candidates in the 1500-over enrollment group. As indicated in Table 4, a total of 41.35 vacancies was reported by Kansas superintendents on September 5.

With regard to the regional data, Table 4 shows that the highest number of vacancies occurred in the Northwest and Southeast regions with a total of 16.0 and 7.5 vacancies, respectively. The remaining vacancies were scattered throughout the other regions. Concerning the number of vacancies by size of the school districts, the enrollment category of 400-1499 reported the highest number with 28.55; the smallest number of vacancies was reported by school districts in 1500+ enrollment category with 2.0 vacancies.

#### **Data and Related Interpretations - Administration**

Concerning the availability of administrative personnel, Table 5 indicates a mean average of 3.02. This represents an adequate supply in all the administration areas. The supply of candidates was almost the same in each of the three size categories. An illustration of the data may be found in Chart 3. Furthermore, as noted in Table 6, 4.00 positions remained unfilled on September 5, 1989.

Table 2

TEACHER VACANCIES AT THE ELEMENTARY LEVEL AS REPORTED BY KANSAS SUPERINTENDENTS IN 1989

	STATE OF					REGIO	N	<b>,</b>			SIZĘ OF DISTRICT		
AREA	KANSAS VACANCIES	1 NW	2 SW	3 NC	4 SC	5 SEDG	6 NE	7 WY/JO	8 EC	9 SE	0-399	400-1499	1500-Over
Art	0.7	0	.7	0	0	0	0	0	0	0	.7	0	0
Counselor	13.0	1.5	0	0	2.5	0	1.0	0	5.0	3.0	0	5.5	7.5
Elementary K-3	11.0	1.0	2.0	6.0	0	0	0	0	0	2.0	1	6.0	4.0
Elementary 4-6	5.0	0	0	3.0	0	0	0	0	0	2.0	0	3.0	2.0
Library	1.5	0	0	0	.5	0	0	1.0	0	0	0	0	1.5
Music - Instr.	1.0	1.0	0	0	0	0	0	0	0	0	1.0	0	0
Music - Vocal	.45	0	0	.4	.05	0	0	0	0	0	0	.05	0.4
Physical Ed.	7.0	0	1.0	0	0	0	1.0	0	0	5.0	1.0	6.0	0
Reading	1.0	0	0	0	0	0	0	0	0	1.0	0	0	1.0
Mean Average	40.65	3.5	3.7	9.4	3.05	0	2.0	1.0	5.0	13.0	3.7	20.55	16.40

Table 3

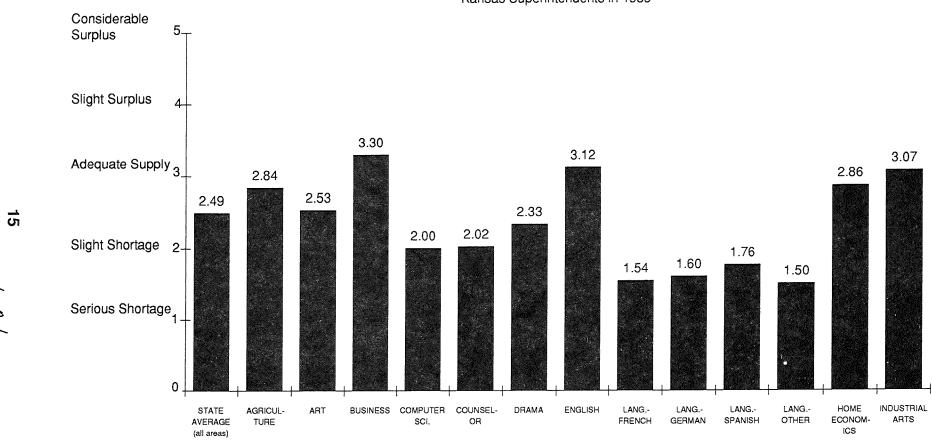
TEACHER SUPPLY AT THE SECONDARY LEVEL AS PERCEIVED BY KANSAS SUPERINTENDENTS IN 1989

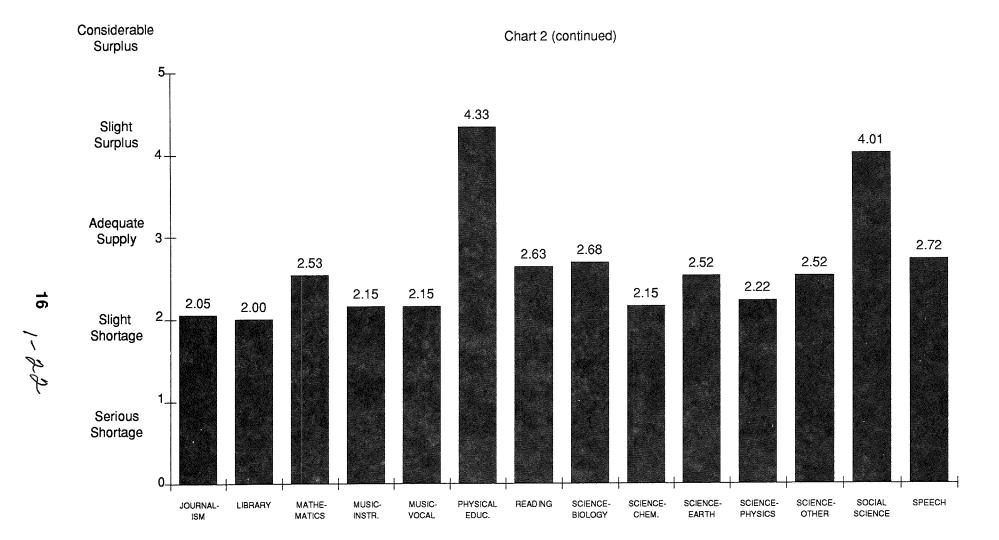
	STATE OF		REGION								SIZE OF DISTRICT			
AREA	KANSAS AVERAGE	1 NW	SW SW	3 NC	4 SC	5 SEDG	6 NE	7 WY/JO	8 EC	9 SE	0-399	400-1499	1500-Over	
Agriculture	2.84	2.67	3.00	3.00	2.00	0	3.00	0	2.83	3.00	3.00	2.80	2.83	
Art	2.53	3.00	2.00	2.75	2.72	2.33	2.60	2.80	2.50	2.00	1.86	2.84	2.43	
Business	3.30	3.75	3.50	4.00	3.23	2.00	2.50	3.33	3.67	2.83	3.54	3.15	3.21	
Computer Science	2.00	2.33	1.67	0	1.88	2.00	3.00	2.00	2.00	1.75	1.75	2.07	2.13	
Counselor	2.02	1.33	2.00	2.00	2.11	2.00	1.33	3.25	2.40	2.25	1.93	1.79	2.46	
Drama	2.33	2.33	2.00	2.50	2.66	2.00	2.25	2.00	3. 00	1.67	2.60	2.00	2.55	
English	3.12	3.00	3.40	3.33	3.00	3.29	2.92	4.17	2.77	2.87	3.12	2.88	3.36	
Language-French	1.54	1.67	1.50	1.00	1.67	2.00	1.50	1.50	1.67	1.33	1.00	1.71	1.62	
Language-German	1.60	1.50	1.00	1.00	1.67	2.00	0	2.40	1.75	1.83	1.67	1.80	2.00	
Language-Spanish	1.76	1.75	1.38	1.60	1.71	2.00	1.57	0	2.14	2.00	1.08	1.74	2.26	
Language-Other	1.50	1.50	1.00	1.00	2.00	0	0	0	2.00	0	1.00	0	2.00	
Home Economics	2.86	1.00	2.00	4.00	2.55	2.50	3.40	3.00	3.50	2.67	2.75	2.64	3.19	
Industrial Arts	3.07	2.00	2.00	4.00	3.80	2.00	3.50	2.00	3.17	3.00	3.33	3.33	2.60	
Journalism	2.05	3.00	1.00	2.50	2.17	2.00	3.00	0	2.00	1.33	2.00	2.44	1.73	

Table 3 (continued)

	STATE OF				R	EGION					SIZI	E OF DIST	RICT
AREA	KANSAS AVERAGE	1 NW	2 SW	3 NC	4 SC	5 SEDG	6 NE	7 WY/JO	8 EC	9 SE	0-399	400-1499	1500-Over
Library	2.00	2.00	1.80	1.50	1.50	3.00	1.00	1.75	2.50	2.50	1.70	1.88	2.33
Mathematics	2.53	2.27	2.80	2.50	2.39	3.00	2.40	2.88	2.50	2.43	2.44	2.43	2.73
Music-Instr.	2.15	1.57	2.00	1.80	2.33	2.00	2.50	2.67	2.10	2.83	1.63	2.28	2.62
Music-Vocal	2.15	1.90	2.00	1.38	2.45	2.33	2.60	3.00	2.20	2.75	1.72	2.32	2.56
Physical Educ.	4.33	4.50	3.71	4.50	4.22	3.00	4.56	5.00	4.50	4.00	4.00	4.36	4.56
Reading	2.63	2.00	2.00	2.00	3.00	3.00	2.00	3.00	2.67	3.50	1.67	3.20	2.63
Science-Biology	2.68	3.20	2.57	2.43	2.50	3.00	2.50	2.20	2.80	3.00	2.45	2.88	2.77
Science-Chemistry	2.15	2.80	2.00	2.67	2.22	1.00	1.50	1.33	2.33	2.00	2.14	2.21	2.09
Science-Earth	2.52	3.50	2.25	0	2.56	1.00	0	2.00	2.60	2.75	2.50	2.60	2.45
Science-Physics	2.22	2.50	1.67	3.00	2.25	1.00	2.00	2.00	2.29	2.50	1.91	2.50	2.27
Science-Other	2.52	3.00	2.00	0	2.00	3.00	0	3.00	3.00	3.00	2.33	2.75	2.44
Social Science	4.01	4.25	4.13	4.20	4.00	4.00	3.75	4.60	3.70	3.78	4.25	3.89	4.07
Speech	2.72	2.33	1.00	4.00	2.67	3.00	0	3.00	3.50	1.50	3.00	2.29	3.00
Mean Average	2.49	2.47	2.13	2.61	2.49	2.34	2.52	2.73	2.67	2.41	2.31	2.48	2.63

Chart 2 Teacher Supply at the Secondary Level as Perceived by Kansas Superintendents in 1989





TEACHER VACANCIES AT THE SECONDARY LEVEL AS
IS REPORTED BY KANSAS SUPERINTENDENTS IN 1989

	STATE OF		***************************************		R	EGION					SIZI	OF DIST	RICT
AREA	KANSAS VACANCIES	1 NW	2 SW	3 NC	4 SC	5 SEDG	6 NE	7 WY/JO	8 EC	9 SE	0-399	400-1499	1500-Over
Agriculture	0	0	0	0	0	0	0	0	0	0	0	0	0
Art	1.8	0	.8	0	1.0	0	0	0	0	0	.8	1.0	0
Business	4.0	2.0	1.0	1.0	0	0	0	0	0	0	2.0	2.0	0
Computer Science	0	0	0	0	0	0	0	0	0	0	0	0	0
Counselor	2.5	0.5	1.0	0	0	0	1.0	0	0	0	0	2.5	0
Drama	3.0	0	0	0	0	0	0	0	0	3.0	0	3.0	0
English	7.0	2.0	1.0	0	0	0	1.0	0	0	3.0	3.0	4.0	0
Language-French	2.0	0	0	0	0	0	0	0	0	2.0	0	1.0	1.0
Language-German	0.5	0.5	0	0	0	0	0	0	0	0	0.5	0	0
Language-Spanish	3.5	0.5	1.0	0	0	0	0	0	0	2.0	1.5	2.0	0
Language-Other	0	0	0	0	0	0	0	0	0	0	0	0	0
Home Economics	0	0	0	0	0	0	0	0	0	0	0	0	0
Industrial Arts	1.0	0	0	0	1.0	0	0	0	0	0	0	1.0	0 4
Journalism	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 4

17

1-23

	STATE OF				R	EGION					SIZI	E OF DIST	RICT
AREA	KANSAS VACANCIES	1 NW	2 SW	3 NC	4 SC	5 SEDG	6 NE	7 WY/JO	8 EC	9 SE	0-399	400-1499	1500-Over
Library	1.0	0	0	1.0	0	0	0	0	0	0	0	1.0	0
Mathematics	7.0	1.0	1.0	1.0	1.0	0	0	0	0	3.0	2.0	5.0	0
Music-Instr.	2.0	1.0	0	1.0	0	0	0	0	0	0	1.0	1.0	0
Music-Vocal	1.0	0	0	0	1.0	0	0	0	0	0	0	1.0	0
Physical Educ.	0	0	0	0	0	0	0	0	0	0	0	0	0
Reading	.05	0	0	0	.05	0	0	0	0	0	0	.05	0
Science-Biology	0	0	0	0	0	0	0	0	0	0	0	0	0
Science-Chem.	1.0	0	1.0	0	0	0	0	0	0	0	0	1.0	0
Science-Earth	0	0	0	0	0	0	0	0	0	0	0	0	0
Science-Physics	1.0	0	0	0	0	1.0	0	0	0	0	0	0	1.0
Science-Other	1.0	0	0	0	0	0	0	0	0	1.0	0	1.0	0
Social Science	0	0	0	0	0	0	0	0	0	0	0	0	0
Speech	2.0	0	0	0	0	0	0	0	0	2.0	0	2.0	0
Totals	41.35	7.50	6.80	4.00	4.05	1.0	2.0	0	0	16.0	10.8	28.55	2.0

#### **Data and Related Interpretations - Special Education**

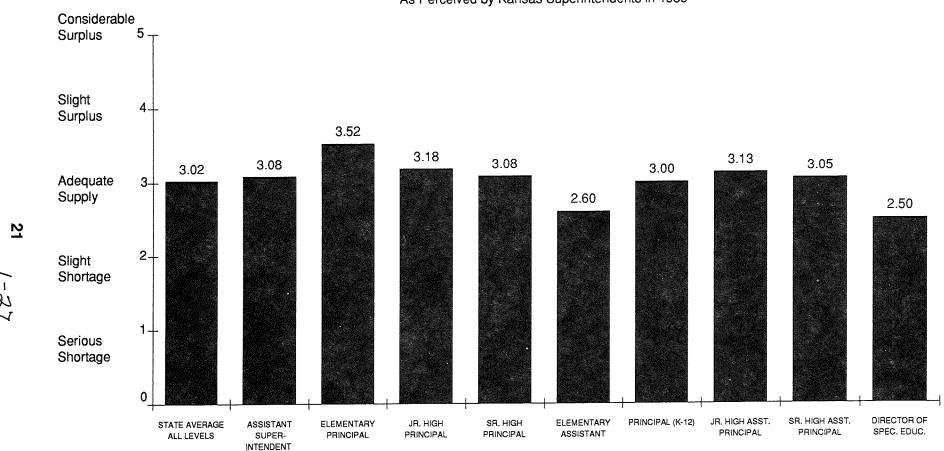
As noted in Section 2 on research procedures employed, data were collected from the Kansas State Department of Education vacancy reports submitted by the special education cooperatives. With regard to the number of vacancies, Table 7 reveals that 162.6 vacancies existed on December, 1989, an increase of 25.3 vacancies over the 137.3 reported in 1988. The largest number of vacancies was reported in the areas of (1) speech, (2) school psychology, and (3) behavior disorders, with 25.40, 21.20, and 18.10 vacancies, respectively. Also, it should be noted that the need for teachers of the learning disabled increased dramatically in 1989. Sixteen positions in 1989 remain unfilled. Too, it appears that the crunch for teachers of the gifted may have increased as 11.10 unfilled vacancies were reported in 1989 as compared to 6.50 in 1988.

ADMINISTRATOR SUPPLY AT ALL LEVELS AS PERCEIVED BY KANSAS SUPERINTENDENTS IN 1989

Table 5

	STATE OF KS					EGION					SIZI	E OF DISTI	RICT
AREA	TOTAL AVERAGE	1 NW	2 SW	3 NC	4 SC	5 SEDG	. •	7 WY/JO	8 EC	9 SE	0-399	400-1499	1500-Over
Assistant Superintendent	3.08	4.00	3.00	4.00	2.00	3.00	3.00	0	2.50	3.00	3.00	3.40	2.80
Elementary Principal	3.52	4.00	3.33	3.75	3.55	3.00	4.00	4.00	3.33	3.20	3.50	3.81	3.24
Jr. High Principal	3.18	3.00	2.50	0	3.67	3.00	0	3.00	3.67	3.00	2.67	3.75	3.10
Sr. High Principal	3.08	2.50	3.57	3.00	3.25	3.00	3.00	2.50	3.33	3.00	3.10	3.22	2.78
Elementary Assistant	2.60	2.00	0	1.00	3.00	3.00	2.00	3.00	3.50	3.00	2.00	2.67	3.00
Principal (K-12)	3.00	3.00	3.00	0	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.20	2.83
Jr. High Asst. Principal	3.13	3.00	3.00	2.00	2.67	3.00	0	3.50	3.50	3.00	3.00	3.33	3.08
Sr. High Asst. Principal	3.05	3.00	3.00	3.00	2.67	2.50	3.00	3.00	4.00	3.00	3.00	3.00	3.09
Director of Special Educ.	2.50	3.00	1.00	1.00	2.67	3.00	3.00	2.00	2.50	3.00	3.00	2.50	2.44
Mean Average	3.02	3.06	2.80	2.55	2.95	2.95	3.00	3.00	3.26	3.03	2.92	3.21	2.93

Chart 3
Administrator Supply at All Levels
As Perceived by Kansas Superintendents in 1989



ADMINISTRATOR VACANCIES AS REPORTED BY KANSAS SUPERINTENDENTS IN 1989

Table 6

	STATE OF KS		27 K	2212110		REGIO					SIZ	E OF DISTI	RICT
AREA	N .	Na .	2 SW	3 NC	4 SC	5 SEDG	6 NE	7 WY/JO	8 EC	9 SE	0-399	400-1499	1500-Over
Assistant Superintendent	0	0	0	0	0	0	0	0	0	0	0	0	0
Elementary Principal	0	0	0	0	0	0	0	0	0	0	0	0	0
Jr. High Principal	0	0	0	0	0	0	0	0	0	0	0	0	0
Sr. High Principal	2.0	0	1.0	1.0	0	0	0	0	0	0	0	2.0	0
Elementary Assistant	0	0	0	0	0	0	0	0	0	0	0	0	0
Principal (K-12)	1.0	0	1.0	0	0	0	0	0	0	0	0	1.0	0
Jr. High Asst. Principal	1.0	0	1.0	0	0	0	0	0	0	0	0	0	1.0
Sr. High Asst. Principal	0	0	0	0	0	0	0	0	0	0	0	0	0
Director of Special Educ.	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	4.0	0	3.0	1.0	0	0	0	0	0	0	0	3.0	1.0

#### **Longitudinal Data - All Areas**

As noted in the introduction, this survey is the eleventh annual survey on teacher supply and demand in Kansas. As such, due to the longitudinal nature of the data which now exists, limited conclusions can be noted. Though limitations exist due to slight modifications in the research procedures employed, the following observations are presented for review and consideration:

#### 1. Special Education

- (a) The 162.6 vacancies reported in 1989 represent an increase in the number of vacancies reported in 1988

   (137.3). The total number of vacancies in 1989
   represents the highest number of vacancies since 1981
   (212.4).
- (b) Data for the ten-year period were as follows:

<u>Area</u>				Numb	er of Vac	ancies					
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Behavior Disorders	51.30	72.70	41.20	23.00	19.30	29.50	27.00	22.00	19.00	18.60	18.1
Learning Disabilities	78.50	69.50	47.50	16.50	7.00	18.50	17.00	25.00	22.00	10.00	16.0
Speech	49.60	37.50	19.50	11.00	4.60	4.00	10.30	6.00	8.00	15.40	25.4
Gifted	61.50	37.20	28.00	30.00	27.30	28.50	23.30	18.00	16.00	6.50	11.1
Semi-Independent EMR	15.50	14.00	11.00	3.00	2.00	-0-	6.00	6.00	3.00	7.00	7.0
School Psychologist	13.60	13.00	12.50	6.00	1.50	2.00	10.80	11.00	11.00	14.70	21.2
Total (areas listed)	270.00	243.90	159.70	89.50	61.70	82.50	94.40	88.00	79.00	72.20	98.8
Total (all Special Education Areas)	292.17	314.30	212.40	117.85	85.30	113.30	147.00	146.00	148.00	137.30	162.6

Table 7 Teacher Vacancies in Special Education as Reported by the Kansas State Department of Education in 1989

Subject Area	State of Kansas Total Vacancies
Semi-Independent (EMR)	7.00
Semi-Dependent (TMR)	4.00
Early Childhood	5.00
Learning Disabilities	16.00
Hearing Impaired	5.00
Physically Impaired	0.00
Gifted	11.10
Behavior Disorders	18.10
Visually Impaired	4.00
Severely Multiply Handicapped	10.30
School Psychologist	21.20
Interrelated	8.00
School Social Work	8.50
Speech	25.40
Spec. Ed. Instruct. Mat.	1.00
Homebound	.60
Other (Not Categorized)	1.70
Counselors (Special Educ.)	2.00
Occupational Therapy	7.40
Physical Therapy	6.30
Adaptive Phy. Ed.	0.00
Audiology	0.00
Total	162.60

#### 2. Elementary Education (K-6)

- (a) The perceived supply of candidates in elementary teaching areas decreased slightly. The mean average for 1989 is 2.98 as compared to 3.06 in 1988.
- (b) In 1979, 1980, and 1981, regional differences remained similar with the greatest supply of candidates in Region 6, East Central, Kansas. In 1982, 1983, and 1984, Wyandotte/Johnson region has had the greatest supply of candidates. In 1985 and 1986, the North Central region had the greatest supply of candidates. In 1987 Wyandotte/Johnson administrators reported the greatest supply of candidates. (Note: Wyandotte/Johnson region was part of Region 6 in 1979, 1980, and 1981). And, in 1988 the Northeast region had the largest supply of candidates. In 1989 the Southeast region had the largest supply of candidates.
- (c) A comparison of the specific teaching areas between 1979 and 1988 reveals:

		Mean Average (State-wide)											
Teaching Area	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
Counseling	1.88	1.81	2.14	2.22	2.33	2.09	2.22	2.24	2.08	1.85	1.59		
Library	1.69	1.82	1.94	2.10	2.06	1.89	1.69	1.91	1.83	2.14	2.18		
Reading	2.03	1.95	2.25	2.44	2.63	2.49	2.36	2.53	2.59	2.60	2.53		
Music	1.85	2.12	2.18	2.14	2.62	2.53	2.53	2.71	2.54	2.32	2.42		
Art	2.65	2.72	2.97	2.95	3.26	3.16	2.91	2.47	3.10	2.63	2.56		
Elementary													
(Reg. Classroom)	3.62	3.67	3.94	3.99	4.33	4.39	4.34	4.48	4.38	4.28	4.48		
Physical Educ.	3.65	3.91	4.10	4.20	4.48	4.53	4.44	4.17	4.36	4.17	4.19		

#### 3. Secondary Education (7-12)

(a) The perceived supply of candidates in secondary teaching areas remains similar to 1988. A slight shortage continues to exist in the foreign language, computer science, library science, counseling, journalism, music and the sciences. Industrial arts, which once experienced a serious shortage of candidates, now has an adequate supply. Specifically, the data in selected areas show:

	Mean Average (State-wide)												
Teaching Area	<u>1979</u>	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989		
Science-Physics	1.20	1.30	1.31	1.48	1.57	1.62	1.79	1.77	2.26	2.13	2.22		
Industrial Arts	1.19	1.39	1.58	2.18	3.25	3.00	3.19	3.44	3.00	3.27	3.07		
Mathematics	1.36	1.41	1.44	1.65	1.77	1.73	1.90	2.34	2.36	2.37	2.53		
Science-Chemistry	1.25	1.45	1.30	1.70	1.74	1.72	1.92	2.00	2.00	2.02	2.15		
Agriculture	1.35	1.51	1.72	1.96	2.43	3.22	3.42	3.07	3.07	2.75	2.84		
Library Science	1.58	1.66	1.85	2.17	1.90	1.84	1.76	1.88	1.83	2.12	2.00		
Language-Spanish	1.83	1.80	2.24	1.91	1.93	1.81	1.92	2.10	2.12	1.79	1.76		
Social Studies	3.00	3.25	3.31	3.44	3.79	4.07	3.65	3.83	3.96	3.73	4.01		
<b>Physical Education</b>	3.68	3.91	4.14	4.07	4.43	4.58	4.48	4.13	4.40	3.98	4.33		

- (b) Regionally, the supply of candidates appears to be evenly distributed. A slightly greater supply of candidates was reported in Region 7, The Wyandotte/Johnson region of Kansas.
- (c) The number of secondary vacancies decreased with 41.35 reported in 1989, as opposed to 67.50 in 1988.

(d) School districts with smaller enrollments continue to provide the greatest opportunities for employment. The overall mean average data, by size of school district, between 1979 and 1989, reveal:

District			М	ean Av	erage	(All Te	eachin	g Area	s)		
Enrollment	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
0-399	1.76	1.83	1.76	1.87	2.12	2.42	2.49	2.55	2.65	2.33	2.31
400-1,499	1.84	2.00	1.92	2.23	2.22	2.45	2.58	2.73	3.47	2.61	2.47
1,500 and above	2.18	2.36	2.44	2.45	2.43	2.66	2.64	2.71	2.73	2.66	2.63

### Section 4

## **Principal Findings and Conclusions**

Prior to summarizing the results of this study, certain limitations should be noted. First, the actual number of vacancies as of September 5, 1989, should be somewhat higher than reported. In a few instances, respondents did not report vacancies if the positions were filled during the last two weeks of September. In most of those cases, decisions had been made in regard to who would be hired prior to September 5, but the teacher did not begin working until after September 5.

Secondly, the availability of candidates, as perceived by the respondents, could vary from respondent to respondent based on their perception of what constitutes an adequate supply, shortage, etc.

Specifically, through contact with a large percentage of respondents, the authors have noticed a tendency for respondents to underestimate the supply of candidates in all teaching areas. Thus, the reader should be aware of this aspect while interpreting the data presented.

Finally, employing officials often view the supply of candidates in a two-dimensional framework which includes: (1) the actual quantity of candidates, and (2) the quality of candidates. Therefore, a respondent may perceive a slight shortage in the supply of candidates in a specific teaching area when in fact the number of candidates was adequate. This tends to

occur when the quality of candidates would not reach the level of expectation desired by a superintendent.

Within the above limitations, then, the following findings are presented for review and consideration:

## 1. Elementary (K-6)

- (a) A surplus of classroom and physical education candidates exists in elementary education. The state average was 4.48 for elementary teachers K-6 and 4.19 for physical education teachers. The supply of other elementary teaching areas was perceived to range from a slight shortage to an adequate supply.
- (b) The areas of counseling, library science, reading, music, art, and special education continued to provide the greatest employment opportunities in elementary education.
- (c) The areas of physical education and regular classroom positions, especially for grades K-3, provide the least employment opportunities for elementary teaching.
- (d) Opportunities for employment are similar through all nine regions in Kansas. The average supply of candidates ranged from 2.69 as the low in the Southwest region to a high of 3.23 in the Southeast region.
- (e) Employment opportunities in all district-size categories appear to be similar.

## 2. Secondary (7-12)

- (a) A slight shortage to adequate supply of candidates exists in the majority of secondary teaching areas in Kansas.
- (b) The areas of foreign language, library sciences, counseling, journalism, music and science continue to provide the best employment opportunities. The relatively new area of computer science as well as the language-related disciplines, particularly any combination of English, journalism, and foreign languages, appear to offer excellent employment opportunities. Excellent opportunities also exist for candidates qualified to teach music at both the elementary and secondary levels.
- (c) Opportunities for candidates certified to teach in any two or more areas appear to be great, particularly in the small districts.
- (d) The areas of physical education, social science, business, and industrial arts provide the least employment opportunities.
- (e) All regions appear to have a slight shortage to adequate supply of candidates for the majority of the secondary teaching areas. The greatest supply of candidates was reported to be available in the Wyandotte/Johnson region (Region 7).
- (f) The supply of candidates appears to be greatest in districts in the 1500-over enrollment category. School districts with smaller enrollments provide slightly greater opportunities for employment.

## 3. Administration

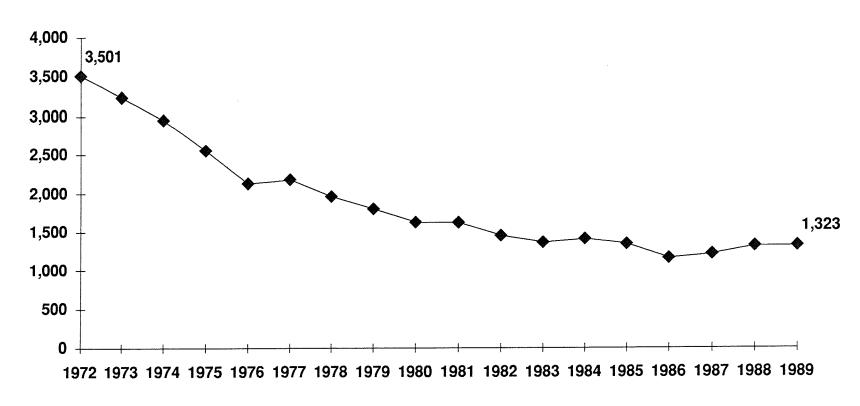
- (a) Adequate supply to a slight surplus of candidates exists in the majority of the administrative areas. The greatest supply of candidates was reported in the East Central region of Kansas.
- (b) Employment opportunities in administration would be greater in the districts with enrollments of 400-1,499 students.

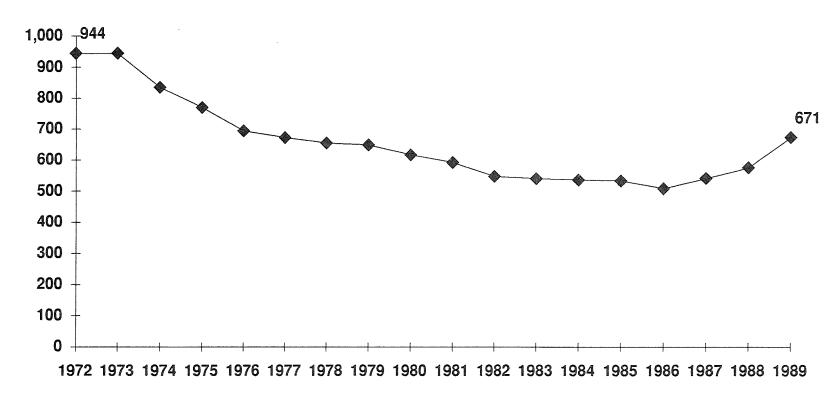
## 4. Special Education

- (a) A shortage of special education teachers was reported in all teaching areas in the state of Kansas.
- (b) The areas of (1) speech, (2) school psychology, (3) behavior disorders, (4) severely multiply handicapped, and (5) gifted provide the best employment opportunities. Excellent employment opportunities also exist in areas of occupational therapy and social work.

## **APPENDICES**

Appendix A
Composite of the Number of Students Completing Preparation for
Teaching Certificates for the First Time at All Regents' Institutions





Appendix C

## Number of Students Completing Preparation for Teaching Certificates for the First Time at Kansas Four-Year Regents' Institutions

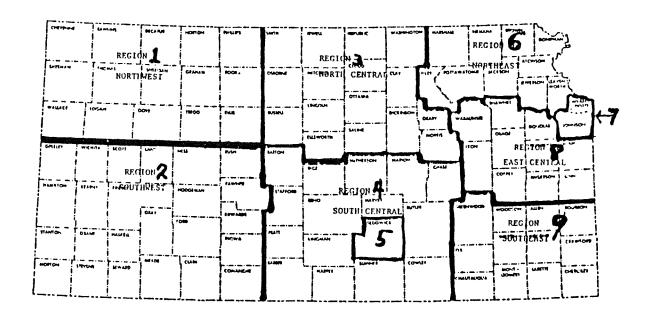
1972	3,501	1981 1,618
1973	3,233	1982 1,448
1974	2,949	1983 1,361
1975	2,548	1984 1,410
1976	2,128	1985 1,342
1977	2,180	1986 1,162
1978	1,959	1987 1,212
1979	1,798	1988 1,318
1980	1,624	1989 (Est.) 1,323

Appendix D

## Number of Students Completing Preparation for Teaching Certificates for the First Time at Kansas Four-Year Private Institutions

1972	944	1981 59	90
1973	944	1982 54	<b>46</b>
1974	834	1983 53	39
1975	769	1984 53	34
1976	693	1985 53	31
1977	671	1986 50	)7
1978	654	1987 54	10
1979	647	1988 57	74
1980	615	1989 (Est.) 67	71

# Appendix E State of Kansas Geographic Regions



## Appendix F

September 5, 1989

## Dear Superintendent:

School administrators and university personnel continue to express concern with the supply and demand of teachers in the state of Kansas. Therefore, in order to keep practitioners in the educational community informed of current trends, we are gathering information to update Emporia State University's annual survey, <u>Teacher Supply and Demand in Kansas Public Schools</u>. We feel the study has provided significant results and that its update is important as well.

Specifically, we are requesting information concerning (1) teacher vacancies as of September 5, 1989, and (2) your opinion on the availability of candidates for each teaching area which you filled for 1989-90. We are hopeful that all chief administrators will complete the enclosed questionnaire, allowing us to reach our 100% return of last year.

For your convenience, enclosed please find a self-addressed envelope. Your assistance is appreciated and a reply on or before Friday, September 29 is needed. Should you have questions and/or suggestions, please call Dr. Jack Skillett at (316) 343-5367. Thank you.

Sincerely,

Jack D. Skillett, Dean The Teachers College

JDS:cls

**Enclosures** 

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	University
District	Use Only

## Appendix G

SCHOOL PERSONNEL SUPPLAND DEMAND QUESTIONNAIRL

## EMPORIA STATE UNIVERSITY The Teachers College

USD#	County	CityFTI	E Enrollment of USD Sept. 20, 1989
Telephone		Individual Responding	Position
		Section A	
DIRECTIONS:	Please list the numb on September 5, 19		alency) that existed in your school district
EXAMPLE:	Physical Ed Counselor		BDGifted-Secondary
ELEMENTARY (F	<del>(-6)</del>	SECONDARY (7-12)	
Counselor	ntendent	Agriculture	Mathematics
	CATION DIRECTION ported by your special rative.		r special education positions that are tonly the position(s) not included in your special
SPECIAL EDUC	ATION	_	councilianal They are
Bilingual Blind Deaf EMH (Semi-Inde Gifted - Element Gifted - Seconda LD - Elementary	ependent)ary	Pt BI SM SN Sc Sp Oi	ccupational Therapy

Reç Sizc strict			iversity e Only		City County _		
			SECTIO	ΝВ			
DIRECTIONS:	(A) a vacancy of DO NOT RATE	continues to exis	t. or (B) a vacan	cy exist ES FOR	ANY TEA	aching areas listed below or 9-90 but has been filled. CHING AREA IN	ily if
EXAMPLE: RATING SCALE	SERIOUS SHORTAGE 1	SLIGHT SHORTAGE 2	ADEQUATE SUPPLY 3	SLIGH SURP 4	• •	CONSIDERABLE <u>SURPLUS</u> 5	
Physical Educa Counselor Social Studies. English		Vaca Con Sligh Con	sidered candidat	o exist for the didates es for t	or 1989-90 s teaching existed. is teaching	a for 1989-90.  Described Shortage of candigarea for 1989-90 and filled the garea for 1989-90 and 1989	ne position(s).
ELEMENTARY	<u>′(K-6)</u>	SEC	ONDARY (7-12)				
Counselor Elementary (K- Elementary (4- Library Music-Instrume Music-Vocal Physical Educa Reading  ADMINISTRAT  Assistant Supe Elementary Pr Junior High/Mi School Principal (K-12 Elem. Asst Pri Jr. High Asst. Director of Spe	erintendent incipal iddle cipal rincipal ncipal Principal Principal ecial Ed	Art Busic Com Cour Dran Engl Lang Lang Lang Indu Jour	puter Science ness puter Science na juage-French guage-Spanish guage-German guage-Other ne Economics strial Arts			Library	
	LIOATION DIDE	CTIONS: DO N	OT COMPLETE	for spe	cial educa	tion positions that are	
education code SPECIAL ED Adaptive Phy Bilingual Blind Deaf EMH (Semi-Ir Gifted - Eleme Gifted - Secon LD - Element	I reported by you operative.  UCATION sical Education	ır special educa	tion cooperative	Oc. Phy BD SM TM Scl Sp Ort Nu	cupational vsical Ther HH (Semi-Dago) Psycheech Correhopedicall	tion positions that are position(s) not included in your therapy	our special
LD - Seconda	ary	******		40 50	Jai WOIKE	I	

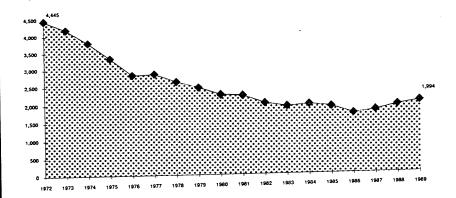
# NUMBER OF TEACHERS PREPARED IN KANSAS HIGHER EDUCATION INSTITUTIONS

## A SPECIAL REPORT

Number of Teachers Prepared in Kansas Higher Education Institutions 1972-1989 Education 1/30/90 Attachment 2

A Special Report

Composite of the Number of Students Completing Preparation for Teaching Certificates for the First Time at All Kansas Four-Year Institutions



Jones Institute for Educational Excellence The Teachers College Emporia State University

Jack D. Skillett, Dean The Teachers College Bill H. Scofield, Professor The Teachers College

January, 1990

## Jones Institute for Educational Excellence

The Teachers College Emporia State University January, 1990

#### Number of Teachers Prepared in Kansas Higher Education Institutions

For the third consecutive year, the number of students training to be teachers has increased according to information gathered by a recent study of the Jones Institute for Educational Excellence at Emporia State University. The 5.4 percent increase reported in 1989 follows increases of 7.9 and 4.9 in 1988 and 1987. This three-year increase of 18.2 percent is the largest increase recorded since 1972 which was the beginning of a rather dramatic decline in the number of teachers prepared in Kansas. Nevertheless, the total number of teachers prepared by higher education institutions in 1989 is 214 less than prepared in 1981, a 9.69 percent difference.

Between 1972 and 1979 the number of teachers prepared by higher education institutions in Kansas, both public and private, declined 44.9 percent. Between 1980 and 1989, the decline was 10.9 percent. Overall, the number of teachers being prepared has dropped from 4,455 in 1972 to 1,994 in 1989, a 55.2 percent decrease.

Debate lingers as to whether a teacher shortage looms in the foreseeable future for the mid-western states. While the three-year increase in the number of teachers being prepared does not necessarily assure a long-term upward trend, it seems reasonable to conclude that educators should be encouraged by the strong reversal of the downward trend. The National Center of Education Statistics predicts that an additional 1,118,000 elementary and over 500,000 secondary teachers will be needed in 1993. In Kansas, the teacher shortage seems to be limited to selected subject matter areas to include special education, foreign languages, library science and to a limited extent the areas of math, science and language arts. Futhermore, it appears a substantial surplus of teachers has recently emerged in the area of elementary education.

Of course, many factors enter into supply and demand statistics, such as geographical location, size of community, and as already noted, subject matter fields. However, the three-year upward trend reported in 1987, 1988, and 1989 is encouraging. This seems especially significant when one considers the substantial increase in admission and exit standards established by institutions training teachers throughout the state.

What follows is a report on findings of the 1989 study by the Jones Institute for Educational Excellence.

#### Methodology

The Jones Institute for Educational Excellence requested from all teacher training institutions in the state of Kansas an update of their 1988 estimates of students who completed requirements for initial certification in 1987. These institutions were also asked to provide estimates of the numbers who would complete preparation programs for teacher certification in 1989. Finally, respondents were asked to provide data on a calendar year basis (January 1 - December 31) to assure a common data base for 1988 and 1989.

#### Analysis of the Data -Regents Institutions

As reflected in Table 1, the number of students who completed teacher certification programs at Regents Institutions declined from 3,501 in 1972 to an estimated 1,323 in 1989. The decrease of 2,178 students represents a 62.2 percent decline from the number of teachers who were prepared for teaching in 1972.

As illustrated in Chart 1, data reveal that the largest decline in the number of teachers prepared occurred between 1972 and 1979. During this eight-year period, a decline of 48.6 percent was reported. A more gradual decline of 18.5 percent was reported for the period between 1980 and the estimate for 1989.

Nevertheless, as noted earlier the 18.2 percent increase over the last three-year period is a dramatic reversal of a downward trend. This trend appears to be especially significant.

#### Analysis of the Data -Private Four-Year Institutions

As shown by Table 2, the private four-year Kansas institutions with accredited teacher preparation programs prepared 944 students in 1972. By 1989 this number had decreased to 671 students, which represented a 28.9 percent decline in the number being prepared to teach.

As was the case with the Regents Institutions, private four-year institutions with approved teacher preparation programs also prepared fewer students for teaching during the period from 1972 to 1979. During this eight-year period, a decline of 31.5 percent was noted. However, for the period from 1980 to 1989, 56 additional students were prepared to teach -- an increase of 9.1 percent. A graphic depiction of those data may be found in Chart 2.

## Analysis of the Data - All Kansas Four-Year Institutions

Data in Table 3 indicate that 4,445 students completed teacher certification programs at all of the Kansas four-year institutions in 1972. By 1989 this number had declined to an estimated 1,994 students, a 55 percent decline.

As illustrated in Chart 3, the most dramatic decline of students being prepared to teach occurred in the year 1972 and 1979. During this eight-year period, 2,000 fewer students were prepared by Kansas four-year public and private institutions, a decline of 45 percent. As previously noted, a more gradual decline occurred in the years between 1980 and 1989. During this period, 245 fewer students were trained to teach at all Kansas four-year institutions. This amounted to a decline of 10.9 percent.

#### Reflections

In 1985 the researchers in a similar report stated "it is quite apparent that until entry and career level salaries are more competitive with similar positions in the private sector; until the career teacher can achieve through assignment differential pay and responsibilities; until the profession can attract and retain a higher percentage of the academically talented; and until the profession is received in more positive terms by the general public, the shortage of qualified teachers will continue. Kansas, in particular, may be faced with a major teacher shortage by 1990".

Will we have a teacher shortage in 1990 as noted in 1985? We believe not, and, if so, the shortage will be confined to a limited number of subject areas - perhaps special education, foreign languages, and library science. Of course, shortages in a number of areas may also be found in selected geographical areas in Kansas. What has emerged in five years to change this rather profound prediction in 1985? Simply stated, teachers salaries in Kansas, especially in predominantly rural areas, appear strong when compared to salary conditions reported on the farm and by businessmen in small communities. Too, one cannot ignore several societal trends to include but not be limited to the number of females entering the workforce, and, subsequently, the return of previously certified personnel to the available pool of candidates for teaching positions. Also, the increase in the number of teachers being prepared may well alleviate any serious shortage that may have been created through increased demand.

Are we saying that we should not be concerned or that additional incentives should not be provided so academically talented students will enter and stay in the profession? Of course not! A large number of teachers trained in the 70's are re-entering the profession and continued improvement in salaries for teachers at the entry level and especially for talented experienced teachers is a must.

The restructuring of our public school systems to allow teachers to assume different roles and remain as teachers is essential if we are to retain our best teachers and improve the profession. Also, it goes almost without saying that patrons in communities must continue to support professional staff members in their schools if they want to maintain an outstanding corp of teachers.

Lastly, we should not be complacent. Storm clouds do exist and include the significant number of teachers that will retire in the 1990's due to the number of new teachers hired in the 1960's, the potential for heavy recruitment of new teachers prepared in Kansas by school systems in other states such as Florida, Arizona, Texas, and California and, of course, our economy. An improved economy in the state of Kansas could dramatically impact the available supply of teachers as experienced teachers will exit the profession, especially in areas of math and science. But, the storm clouds could dissipate rapidly. A recent report on supply and demand of teachers in Kansas, as perceived by Kansas superintendents, revealed a substantial supply of teachers in the areas of elementary education and the secondary areas of home economics, business education, physical education and the social sciences. Could it be, especially in the the mid-western states, that a major shortage of teachers will not develop? At the very least, policy makers need to consider this possibility as trend indicators over the last eighteen months reveal the potential for a major reversal.

Number of Students Completing Preparation for Teaching Certificates for the First Time at Kansas Four-Year Regents' Institutions

Chart 1 Composite of the Number of Students Completing Preparation for Teaching Certificates for the First Time at All Regents' Institutions

1,798

1988

1989 (Est.) 1,323

1,959

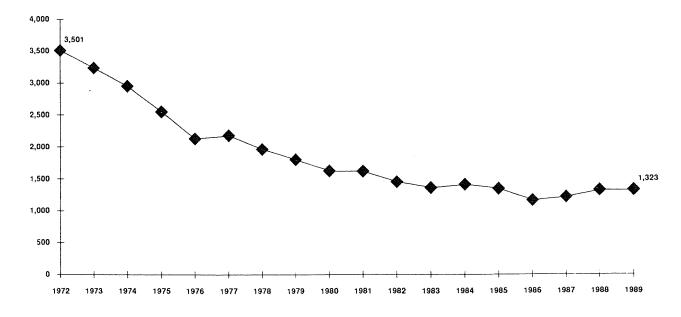
1,212

1,162

2,180 2,128 2,548 2,949 3,233 3,501

> 1984 1983 1982 1981

1,342 1,410 1,361 1,448 1,618



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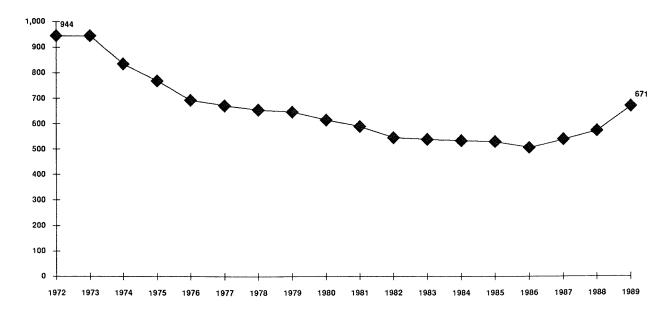
Table 2

Number of Students Completing Preparation for Teaching Certificates for the First Time at Kansas Four-Year Private Institutions

Chart 2
Composite of the Number of Students Completing Preparation for Teaching Certificates for the First Time at Kansas Four-Year Private Institutions

1989 (Est.)

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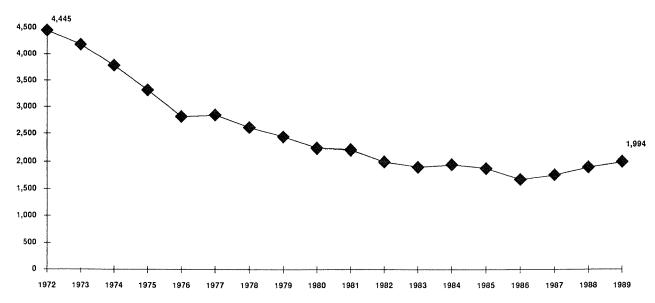


2-8

4,445 4,177 2,821 3,317 3,783 2,851 2,445 2,613 1982 1981 1983 1985 1984 1989 (Est.) 1,994 1,900 1,994 2,208 1,944 1,873 1,892 1,669 1,752

Number of Students Completing Preparation for Teaching Certificates for the First Time at All Kansas
Four-Year Institutions

Chart 3
Composite of the Number of Students Completing Preparation for Teaching Certificates for the First Time at All Kansas
Four-Year Institutions



# A SPECIAL REPORT ON KANSAS TEACHER SUPPLY AND DEMAND

January, 1990

by

Dr. Jack D. Skillett Dean, The Teachers College Emporia State University Dr. Bill Scofield Professor, The Teachers College Emporia State University

## Introduction

For the third consecutive year, the number of students training to be teachers has increased according to information gathered by a recent study of the Jones Institute for Educational Excellence at Emporia State University. The 5.4 percent increase reported in 1989 follows increases of 7.9 and 4.9 in 1988 and 1987. This three-year increase of 18.2 percent is the largest increase recorded since 1972 which was the beginning of a rather dramatic decline in the number of teachers prepared in Kansas. Nevertheless, the total number of teachers prepared by higher education institutions in 1989 is 214 less than prepared in 1981, a 9.69 percent difference.

Between 1972 and 1979 the number of teachers prepared by higher education institutions in Kansas, both public and private, declined 44.9 percent. Between 1980 and 1989, the decline was 10.9 percent. Overall, the number of teachers being prepared has dropped from 4,455 in 1972 to 1,994 in 1989, a 55.2 percent decrease.

Debate lingers as to whether a teacher shortage looms in the foreseeable future for the mid-western states. While the three-year increase in the number of teachers being prepared does not necessarily assure a long-term upward trend, it seems reasonable to conclude that educators should be encouraged by the strong reversal of the

downward trend. The National Center of Education Statistics predicts that an additional 1,118,000 elementary and over 500,000 secondary teachers will be needed in 1993. In Kansas, the teacher shortage seems to be limited to selected subject matter areas to include special education, foreign languages, library science and to a limited extent the areas of math, science and language arts. Furthermore, it appears a substantial surplus of teachers has recently emerged in the area of elementary education.

Of course, many factors enter into supply and demand statistics, such as geographical location, size of community, and as already noted, subject matter fields. However, the three-year upward trend reported in 1987, 1988, and 1989 is encouraging. This seems especially significant when one considers the substantial increase in admission and exit standards established by institutions training teachers throughout the state.

Demand for Teachers (Survey of Kansas Superintendents) - September 5, 1989

## 1. Special Education

- a. The 162.60 vacancies reported in 1989 represent an increase in the number of vacancies reported in 1988 (137.3).

  Nevertheless, the total number of vacancies in 1989 and 1988 represents the highest number of vacancies since 1981 (212.4).
- b. Longitudinal data for the special education areas with the greatest number of reported vacancies reveal several differences. Specifically, data for the eleven-year period were as follows:

<u>Area</u>				Num	ber of Va	acancies					
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Behavior Disorders Learning Disabilities Speech Gifted Semi-Independent EMR School Psychologist	51.30 78.50 49.60 61.50 15.50 13.60	72.70 69.50 37.50 37.20 14.00 13.00	41.20 47.50 19.50 28.00 11.00 12.50	23.00 16.50 11.00 30.00 3.00 6.00	19.30 7.00 4.60 27.30 2.00 1.50	29.50 18.50 4.00 28.50 -0- 2.00	27.00 17.00 10.30 23.30 6.00 10.80	22.00 25.00 6.00 18.00 6.00 11.00	19.00 22.00 8.00 16.00 3.00 11.00	18.60 10.00 15.40 6.50 7.00 14.70	18.1 16.0 25.4 11.1 7.0 21.2
Total (areas listed) Total (all Special Education Areas)	270.00 292.17	243.90 314.30	159.70 212.40	89.50 117.85	61.70 85.30	82.50 113.30	94.40 147.00	88.00 146.00	79.00 148.00	72.20 137.30	98.8

## 2. <u>Elementary Education (K-6)</u>

(a) The perceived supply of candidates in elementary teaching areas decreased slightly. The mean average for 1989 is 2.98 as compared to 3.06 in 1988.

- (b) In 1979, 1980, and 1981, regional differences remained similar with the greatest supply of candidates in Region 6, East Central, Kansas. In 1982, 1983, and 1984, Wyandotte/Johnson region has had the greatest supply of candidates. In 1985 and 1986, the North Central region had the greatest supply of candidates. In 1987 Wyandotte/Johnson administrators reported the greatest supply of candidates. (Note: Wyandotte/Johnson region was part of Region 6 in 1979, 1980, and 1981). And, in 1988 the Northeast region had the largest supply of candidates. In 1989 the Southeast region had the largest supply of candidates.
- (c) A comparison of the specific teaching areas between 1979 and 1988 reveals:

1000 1000				Mear	n Aver	age (S	itate-w	ride)			
Teaching Area	1979	1980	1981	1982	<u> 1983</u>	1984	1985	1986	1987	1988	<u>1989</u>
Counseling	1.88	1.81	2.14	2.22	2.33	2.09	2.22	2.24	2.08	1.85	1.59
Library	1.69	1.82	1.94	2.10	2.06	1.89	1.69	1.91	1.83	2.14	2.18
Reading	2.03	1.95	2.25	2.44	2.63	2.49	2.36	2.53	2.59	2.60	2.53
Music	1.85	2.12	2.18	2.14	2.62	2.53	2.53	2.71	2.54	2.32	2.42
Art	2.65	2.72	2.97	2.95	3.26	3.16	2.91	2.47	3.10	2.63	2.56
Elementary (Reg. Classroom) Physical Educ.	3.62 3.65	3.67 3.91	3.94 4.10	3.99 4.20	4.33 4.48	4.39 4.53	4.34 4.44	4.48 4.17	4.38 4.36	4.28 4.17	4.48 4.19

## 3. Secondary Education (7-12)

(a) The perceived supply of candidates in secondary teaching areas remains similar to 1988. A slight shortage continues to exist in the foreign language, computer science, library science, counseling, journalism, music and the sciences. Industrial arts, which once experienced a serious shortage of candidates, now has an adequate supply. Specifically, the data in selected areas show:

				Mea	n Avei	rage (	State-	vide)_			
Teaching Area	1979	1980	1981	1982	1983			1986	1987	1988	<u> 1989</u>
Science-Physics	1.20	1.30	1.31	1.48	1.57	1.62	1.79	1.77	2.26	2.13	2.22
Industrial Arts	1.19	1.39	1.58	2.18	3.25	3.00	3.19	3.44	3.00	3.27	3.07
Mathematics	1.36	1.41	1.44	1.65	1.77	1.73	1.90	2.34	2.36	2.37	2.53
Science-Chemistry	1.25	1.45	1.30	1.70	1.74	1.72	1.92	2.00	2.00 3.07	2.02 2.75	2.15 2.84
Agriculture	1.35	1.51	1.72 1.85	1.96 2.17	2.43 1.90	3.22 1.84	3.42 1.76	3.07 1.88	3.07 1.83	2.75	2.00
Library Science Language-Spanish	1.58 1.83	1.66 1.80	2.24	1.91	1.93	1.81	1.92	2.10	2.12	1.79	1.76
Social Studies	3.00	3.25	3.31	3.44	3.79	4.07	3.65	3.83	3.96	3.73	4.01
Physical Education	3.68	3.91	4.14	4.07	4.43	4.58	4.48	4.13	4.40	3.98	4.33

(b) Regionally, the supply of candidates appears to be evenly distributed. A slightly greater supply of candidates was reported in Region 7, The Wyandotte/Johnson region of Kansas.

(c) The number of secondary vacancies decreased with 41.35 reported in 1989, as opposed to 67.50 in 1988.

(d) School districts with smaller enrollments continue to provide the greatest opportunities for employment. The overall mean average data, by size of school district, between 1979 and 1989, reveal:

District <u>Enrollment</u>	1979	1980	Me 1981	ean Av 1982		(All T 1984	<u>eachi</u> 1985	ng Are 1986	as) 1987	1988	1989
0-399 400-1,499 1,500 and above	1.84	2.00	1.92	1.87 2.23 2.45	2.22	2.45	2.58	2.73	3.47	2.61	2.31 2.47 2.63

## Number of Teachers Prepared

1. Regents Institutions. As reflected in Table 1, the number of students who completed teacher certification programs at Regents Institutions declined from 3,501 in 1972 to an estimated 1,323 in 1989. The decrease of 2,178 students represents a 62.2 percent decline from the number of teachers who were prepared for teaching in 1972.

As illustrated in Chart 1, data reveal that the largest decline in the number of teachers prepared occurred between 1972 and 1979. During this eight-year period, a decline of 48.6 percent was reported. A more gradual decline of 18.5 percent was reported for the period between 1980 and the estimate for 1989.

Nevertheless, as noted earlier the 18.2 percent increase over the last three-year period is a dramatic reversal of a downward trend. This trend appears to be especially significant.

2. Private Four-Year Institutions. As shown by Table 2, the private four-year Kansas institutions with accredited teacher preparation programs prepared 944 students in 1972. By 1989 this number had decreased to 671 students, which represented a 28.9 percent decline in the number being prepared to teach.

As was the case with the Regents Institutions, private four-year institutions with approved teacher preparation programs also prepared fewer students for teaching during the period from 1972 to 1979. During this eight-year period, a decline of 31.5 percent was noted. However, for the period from 1980 to 1989, 56 additional students were prepared to teach -- an increase of 9.1 percent. A graphic depiction of those data may be found in Chart 2.

3. All Kansas Four-Year Institutions. Data in Table 3 indicate that 4,445 students completed teacher certification programs at all of the Kansas four-year institutions in 1972. By 1989 this number had declined to an estimated 1,994 students, a 55 percent decline.

As illustrated in Chart 3, the most dramatic decline of students being prepared to teach occurred in the year 1972 and 1979. During this eight-year period, 2,000 fewer students were prepared by Kansas four-year public and private institutions, a decline of 45 percent. As previously noted, a more gradual decline occurred in the years between 1980 and 1989. During this period, 245 fewer students were trained to teach at all Kansas four-year institutions. This amounted to a decline of 10.9 percent.

#### Reflections

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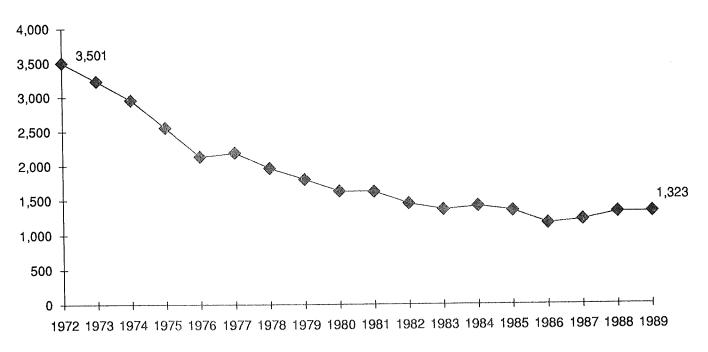
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Table 1

Number of Students Completing Preparation for Teaching Certificates for the First Time at Kansas Four-Year Regents' Institutions

1972	3,501	1981	1,618
1973	3,233	1982	1,448
1974	2,949	1983	1,361
1975	2,548	1984	1,410
1976	2,128	1985	1,342
1977	2,180	1986	1,162
1978	1,959	1987	1,212
1979	1,798	1988	1,318
1980	1,624	1989 (Est.)	1,323

Chart 1
Composite of the Number of Students Completing Preparation for Teaching Certificates for the First Time at Regents' Institutions



Number of Students Completing Preparation for Teaching Certificates for the First Time at Kansas Four-Year Private Institutions

Table 2

1972	944	1981	590
1973	944	1982	546
1974	834	1983	539
1975	769	1984	534
1976	693	1985	531
1977	671	1986	507
1978	654	1987	540
1979	647	1988	574
1980	615	1989 (Est.)	671

Chart 2
Composite of the Number of Students Completing Preparation for Teaching Certificates for the First Time at Kansas
Four-Year Private Institutions

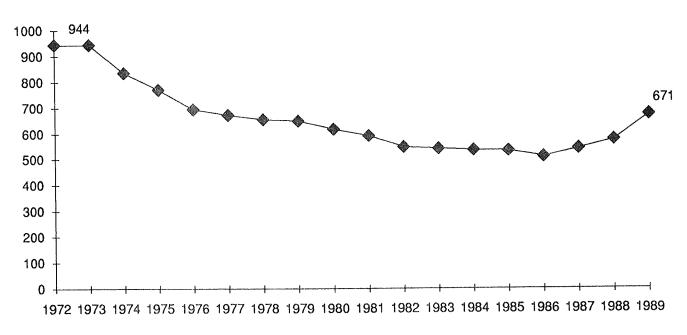


Table 3

Number of Students Completing Preparation for

Teaching Certificates for the First Time at All Kansas

Four-Year Institutions

1972	4,445	1981	2,208
1973	4,177	1982	1,994
1974	3,783	1983	1,900
1975	3,317	1984	1,944
1976	2,821	1985	1,873
1977	2,851	1986	1,669
1978	2,613	1987	1,752
1979	2,445	1988	1,892
1980	2,239	1989 (Est.)	1,994

Chart 3
Composite of the Number of Students Completing Preparation for Teaching Certificates for the First Time at All Kansas
Four-Year Institutions

