

CHAPTER 1

PROFILE OF GEORGIA'S TEACHING WORKFORCE

Introduction

Educator workforce statistics provide valuable characterization, planning, and assessment information through which to observe and improve Georgia's schools and certified labor force of teachers, administrators, and support personnel. The "Profile of Georgia's Teaching Workforce" describes teachers in the state's public schools during the 2000-2001 school year (FY01). Demographic attributes of public school teachers may change either substantially or slightly during a reporting period. Implications derived from substantial and/or from small, or subtle changes may provide evidence that (a) school improvement efforts and interventions have been successful or unsuccessful, (b) targeted improvements were or were not completed within specified time frames and resource allocations, (c) progress is sustained or short-lived, or (d) serves as alerts to needed policy changes or reinforcement.

Teacher employment data from the Georgia Certified Personnel Information Report (CPI) counts individual teachers in several categories: by individual employment count, by job classification(s) or roles, and/or by the subject(s) taught during a subject assignment load. For example, the Full Time Equivalent (FTE) count shows daily full and part-day teaching assignments by class segments, with portions of the workday signified by decimal fractions. Personnel counts on the CPI show each individual who holds a position that requires a Georgia certificate, and are in whole numbers. Both styles of reporting are valuable, and are identified when included in the Status Report-2001.

Demographic Summary

Workforce Size

The educator workforce has been growing at an annual rate of about 3% since FY97, with significant growth in the number of teaching positions (see Figure 1.1). Georgia's public educator workforce numbered 110,784 in FY01, with 94,689 teachers. In FY01, Georgia hired 11,817 teachers. Of the newly hired teachers, 8,595 replaced teachers who left the FY00 workforce, not returning to any Georgia public classroom for the FY01 school year. Another 3,222 teachers were hired to accommodate student enrollment growth and other demand increases (see Figure 1.2). Over one-half of the new hires were in the larger metropolitan areas of Atlanta, Savannah, Augusta, Macon, and Columbus. Although the Atlanta area typically employs about 35% of all teachers, the FY01 Atlanta metropolitan area hires made up 42% of all new hires in Georgia.

Additional Info:

Appendix Item 1.7 breaks down the personnel categories of Georgia teachers (by count of persons) for the period of FY97-FY01.

Figure 1.1. Total Georgia Workforce, FY97-FY01

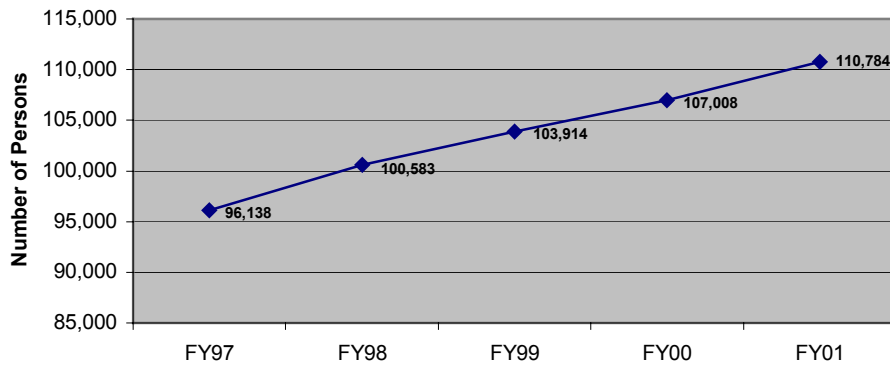
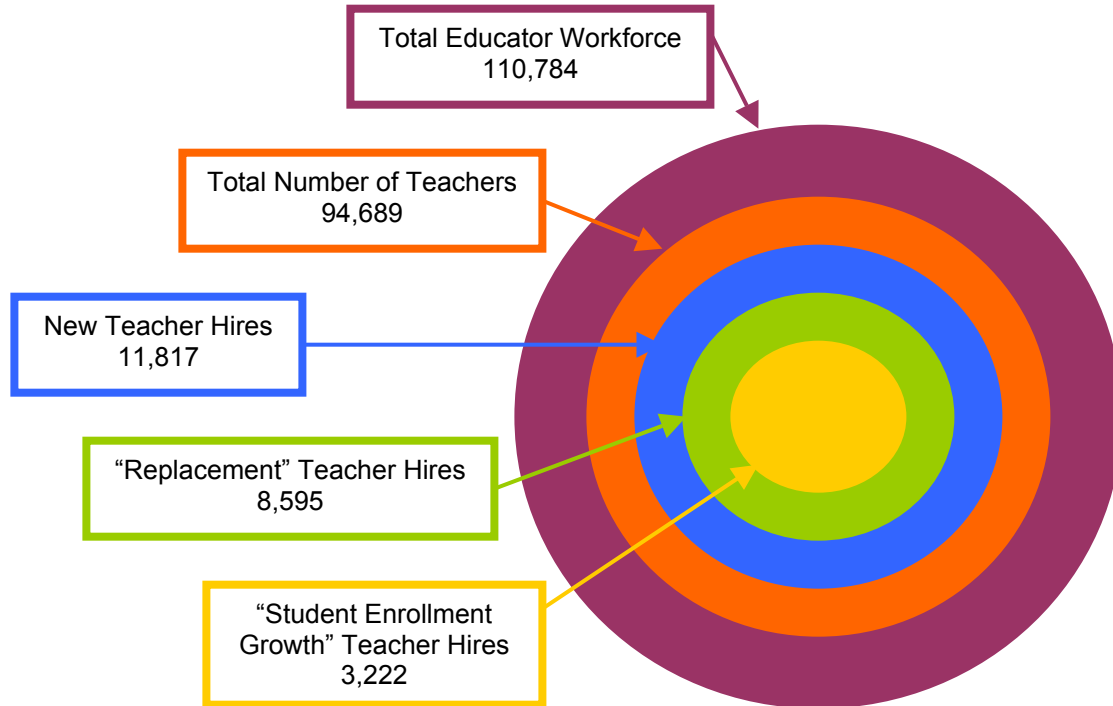


Figure 1.2. Georgia’s Educator Workforce and New Teacher Hires, FY01



Gender and Ethnicity

Women accounted for 81.3% of all new hires and 82.3% of all teachers were women in FY01 (see Table 1.1 and Figure 1.3), continuing the pattern that has held for many years in Georgia. Blacks accounted for 21% of the newly hired teachers, very close to the proportion of Black teachers in the overall FY01 workforce (see Table 1.2 and Figure 1.4).

Table 1.1. Demographic Profile by Gender of Georgia Teachers, FY01

Gender	#	%
Female	78,019	82.39
Male	16,670	17.61
Total	94,689	100.00

Figure 1.3. Demographic Profile by Gender of the Teaching Force in Georgia, FY97-FY01

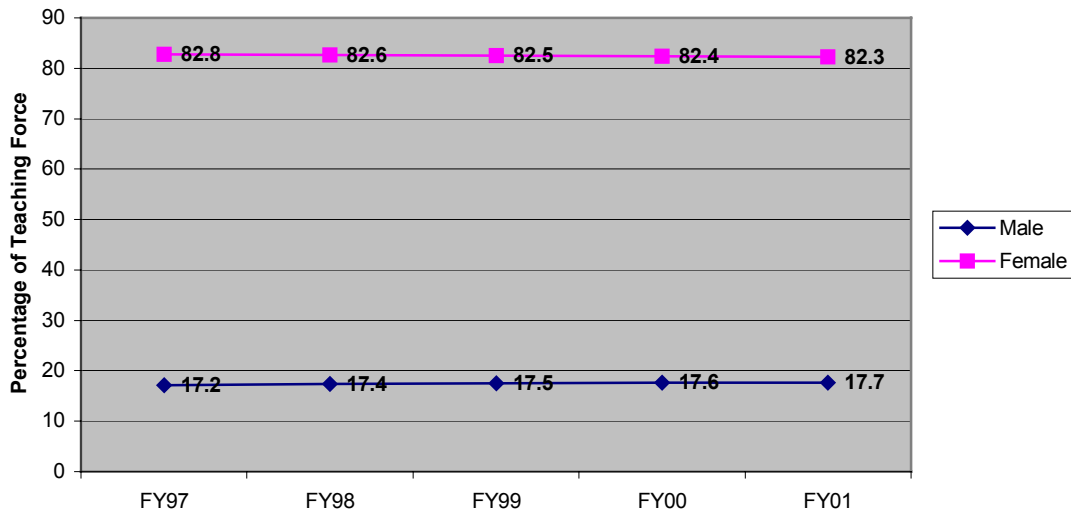
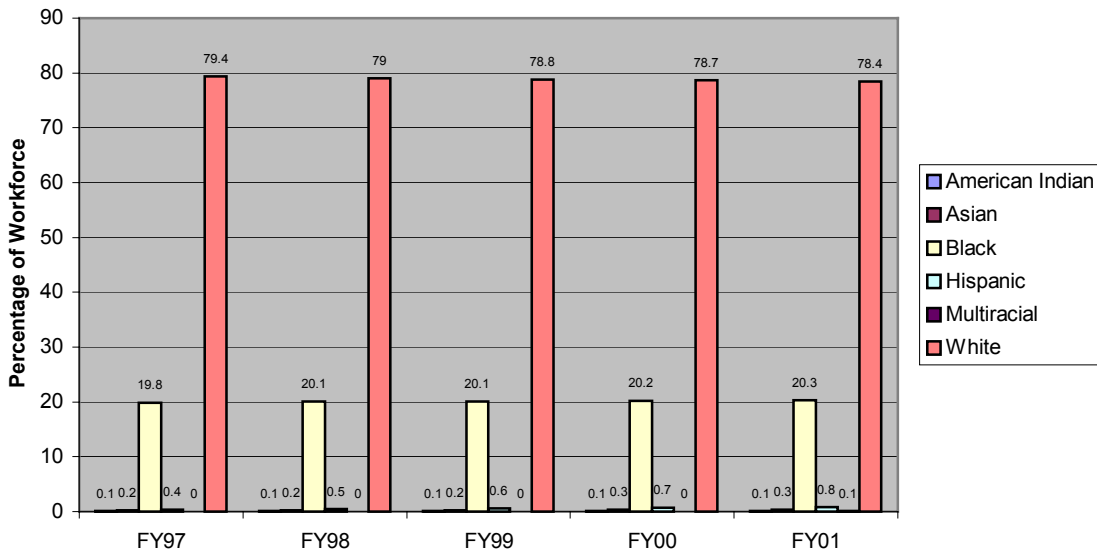


Table 1.2. Demographic Profile by Ethnicity of Georgia Teachers, FY01

Ethnicity	#	%
American Indian	131	0.14
Asian	294	0.31
Black	19,159	20.23
Hispanic	710	0.75
Multiracial	75	0.08
White	74,320	78.49
Total	94,689	100.0

Figure 1.4. Demographic Profile by Ethnicity of the Teaching Force in Georgia, FY97-FY01



Age and Experience

In FY01, the average age of a Georgia teacher was 41 years, and the average age of newly hired teachers was 34 years (see Table 1.3).

Table 1.3. Average Age of All Teachers

Year	Mean Age
1997	41.2
1998	41.3
1999	41.3
2000	41.4
2001	41.5

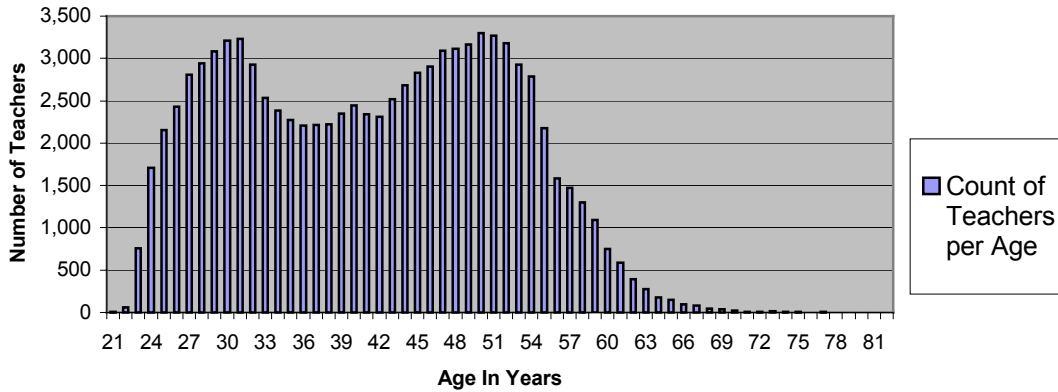
Additional Info:

Appendix Item 1.1 provides a demographic profile of the teaching force in Georgia from FY97 to FY01.

More teachers retire as the current workforce grows older. Increased numbers of Georgia’s educators are reaching retirement age, promising a greater need for teachers in the future. Files from the Georgia Teacher Retirement System (TRS) show that over 2,000 educators retired from the FY00 workforce, up 200 from FY99 and up 500 from FY98. This rate of retirement is likely to continue for a few years, because over 8,000 of the FY01 educators were over 55 years old and nearly 10,000 had over 25 years of experience.

As an increasing number of teachers retire at 55 years and over, the average age of the remaining workforce will eventually decline. A younger workforce is replacing retiring older teachers. The following graphic (see Figure 1.5) shows that the age decline of teachers has not yet begun. The teacher age chart for FY01 displays a conventional U-shaped curve, indicating a disproportionate number of teachers at younger ages 23-32 and at older ages 46-55. This distribution has not changed its shape significantly over the past five years, except for slight elevations in the counts for teachers ages 50 and above.

Figure 1.5. Teacher Age, FY01



Teacher age and years of experience do not necessarily correspond. The following experience chart (Figure 1.6) for Georgia teachers shows a different shape from the age graphic (Figure 1.5). The decline around ages 30-42 corresponds to child-rearing years. The peak between ages 45 and 52 corresponds to the returning years from teacher stop-outs. A teacher who stops-out at 30 with 6 years of experience and returns at 42 has only 6 or 7 years of experience, despite her age. Also, a number of second career teachers will enter into the workforce at the 40-50 age range and have virtually zero experience.

Figure 1.6. Georgia Teachers' Experience, FY01

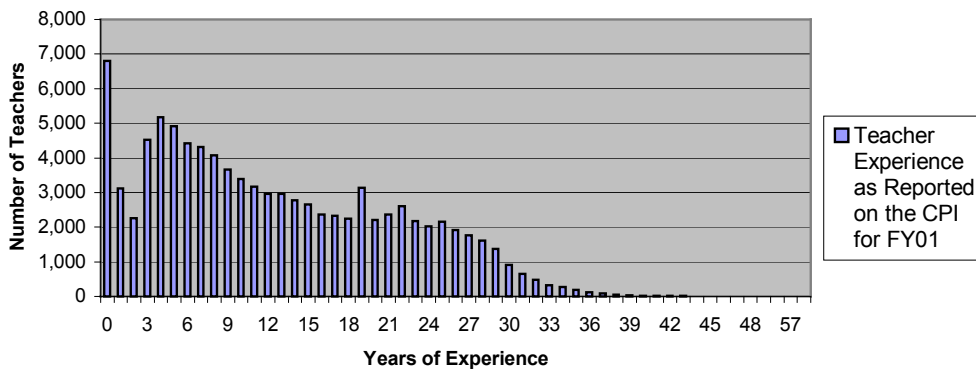


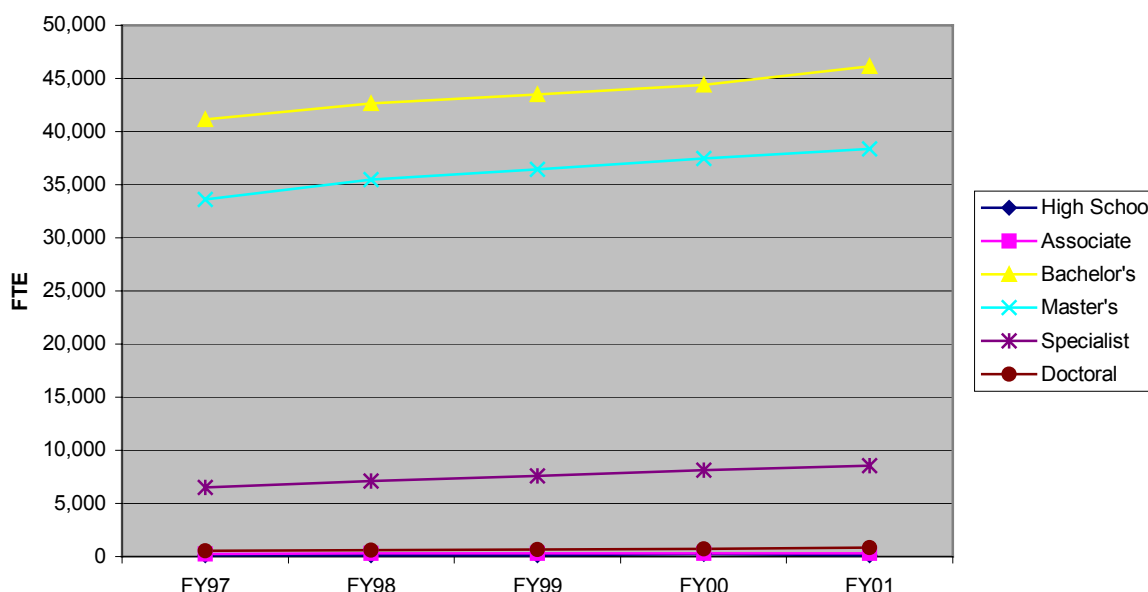
Figure 1.6 indicates a large number of teachers with zero years of creditable Georgia experience, and another peak at 19 years of creditable experience. The apparent dip in experience for years 1 and 2 is due to a practice in Georgia that counts years 0-2 as one-year (i.e., 0), followed by an abrupt jump to show three years of experience. Lastly, the average experience of Georgia teachers was 12.4 years in FY01, though 9,869 (or

approximately 10.4%) of Georgia’s 94,689 educators had accumulated over 25 years of experience. The corresponding percentage for Georgia’s total educator workforce is 12.73%.

Certification Level

In the Georgia certification taxonomy, “level” refers to a teacher’s academic degree achievement. The level is determined by the Georgia Professional Standards Commission (PSC), based in its rule, 505-2-.10, and is supported by educators’ submission of official post-secondary and post-baccalaureate higher education transcripts or other official and approved evidence of alternative preparation. As Figure 1.7 illustrates, the majority of Georgia’s teachers are found at the Bachelor’s level of certification, followed by the Master’s and then the Specialist level of certification.

Figure 1.7. Certification Level of Georgia Teachers, FY97-FY01



The following table (Table 1.4) shows the distribution of the certification levels of Georgia teachers in FY01. The data show that 48.9% of the teachers are at the Bachelor’s level, which is an increase of 0.2% over FY00’s 48.7%.

Table 1.4. Certification Level of FY01 Teachers

Level	#	%
1 High School	136	0.1
2 Associate	312	0.3
4 Bachelor's	46,321	48.9
5 Master's	38,554	40.7
6 Specialist's	8,537	9.0
7 Doctorate	829	0.9

This small change is significant because it is the first increase in baccalaureate level certified employees since FY97, when 50.1% of Georgia's teachers worked at the bachelor level. This shift may have happened because there were a large number of bachelor level new hires, which affected the percentage distributions in the overall workforce. Over 70% of all FY01 new teacher hires, or 8,281 teachers, were hired at the bachelor level.

Subject Areas

The Status Report-2001 focuses the discussion on the content area of the teaching workforce in the four core academic areas of Mathematics, Science, English, and Social Studies, and on few other selected teaching classifications. The following table (Table 1.5) exhibits fairly uniform growth in all areas; however, middle grades subject areas require special explanation.

Table 1.5. Georgia Teacher Workforce by Grade Level and Personnel Category, FY97-FY01

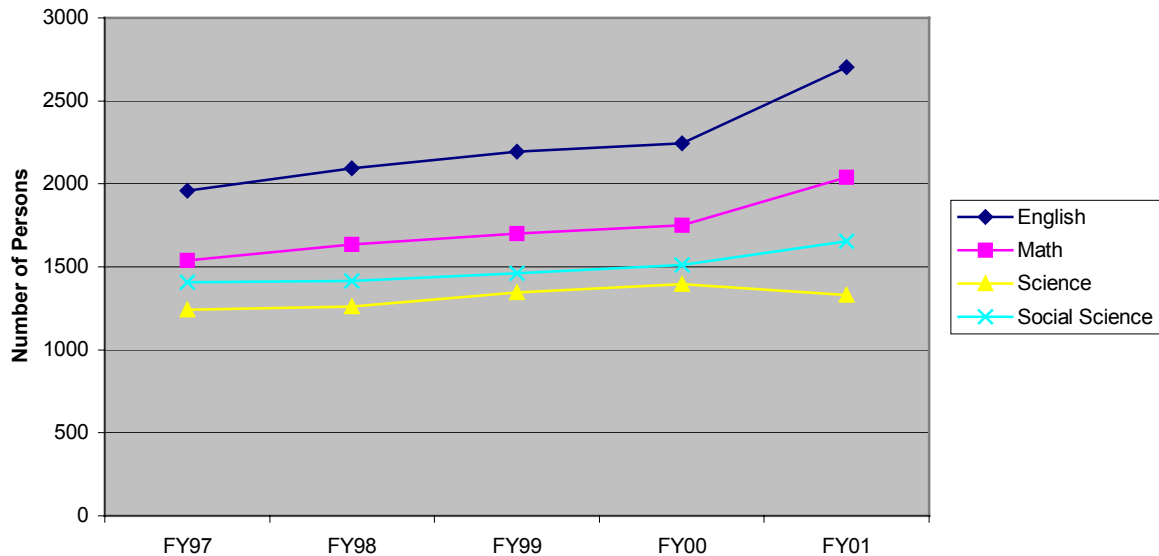
Personnel Category	FY97	FY98	FY99	FY00	FY01	4-Year Average Change	Change FY00-FY01
Middle							
English	1,960	2,093	2,194	2,245	2,702	9.5%	20.4%
Math	1,538	1,634	1,699	1,751	2,040	8.2%	16.5%
Science	1,241	1,261	1,344	1,396	1,329	1.8%	-4.8%
Social Science	1,408	1,416	1,461	1,511	1,653	4.4%	9.4%
High School							
English	2,900	3,277	3,385	3,409	3,350	3.9%	-1.7%
Math	2,577	2,821	2,944	2,994	3,016	4.3%	.7%
Science	2,175	2,618	2,703	2,688	2,746	6.6%	2.2%
Social Science	2,326	2,625	2,706	2,778	2,831	5.4%	1.9%
Special Education							
	9,549	10,206	10,678	11,153	11,698	5.6%	4.9%
Vocational Education							
	2,782	2,742	2,831	2,902	2,898	1.0%	-.1%
Instructional Specialist							
	4,516	4,606	4,800	4,755	4,951	2.4%	4.1%

Additional Info:

Appendix Item 1.3 outlines the change in the profile of Georgia's teaching force from FY97 to FY01 based on FTE counts.

Over the past two years, education reform efforts in certification requirements and in-field assignment patterns have been targeted to the middle grades 6-8. Effective July 1, 2001, the PSC requires that a teacher show evidence of a minimum of 12 semester concentration hours in each of two subject areas in order to be awarded or renewed with a middle grades teaching certificate. Analysis of the FY97-FY01 CPI records shows a dramatic increase in the number of FY01 over FY00 middle grades teachers assigned to teach English (20.4%) and mathematics (16.5%) and who hold the required 20 approved course hours in English and mathematics from previous years (see Figure 1.8). This positive event is a likely result of the required PSC-subject area rule and of other state initiatives to increase teaching standards by providing middle grades teachers with approved course content.

Figure 1.8. Georgia Middle Grades Teacher Workforce by Personnel Category, FY97-FY01



However. During the same FY97-01 period, an increase of only 1.8% was noted in the percentage of teachers who held 20 more hours of approved science courses and were assigned to teach middle grades science. This increase of credentialed science teachers is noticeably less than is the increase of appropriately credentialed middle grades English and mathematics teachers. In fact, the number of science teachers declined from FY00 to FY01. These data, along with out-of-field data reported in the Status Report-2000 and elsewhere in the Status Report-2001, dramatically suggest that Georgia does not have enough middle grades science teachers who are adequately trained in science. The number of teachers assigned to teach science without a science content concentration (23.7%) causes middle grade students to be instructionally underserved in science by qualified teachers when compared to the other three core content areas.

Additional Info:

Appendix Items 1.4 and 1.5 provide a distribution of Grades 6-8 English and Math teachers (respectively) by RESA based on person and FTE counts for FY01.

Since FY00, the PSC has been the lead partner in Georgia's Title II Teacher Quality Enhancement grant activities. These methods are designed to upgrade science and math knowledge through the course work of middle grades teachers in need of training to be considered "in-field" in these content areas. Class enrollments have approached 2000, and more teachers will receive training over the final year of the three-year Title II grant.

The Georgia Department of Education has implemented funding rules that require middle grade teachers to hold concentration areas in the subjects they teach. As mentioned above, the PSC has begun the phase-in of rule changes that will eliminate the renewal of Middle

Grades Generalist certificate in favor of certification for middle grade specialists in the four core academic areas. These two policies alone are not expected to increase the volume of middle grade science teachers. However, these policies along with increased requirements in teacher preparation institutions, professional development initiatives, and pre-service teacher training practices are expected to significantly impact the deficit of qualified middle grades science and other content area teachers over the next three years.

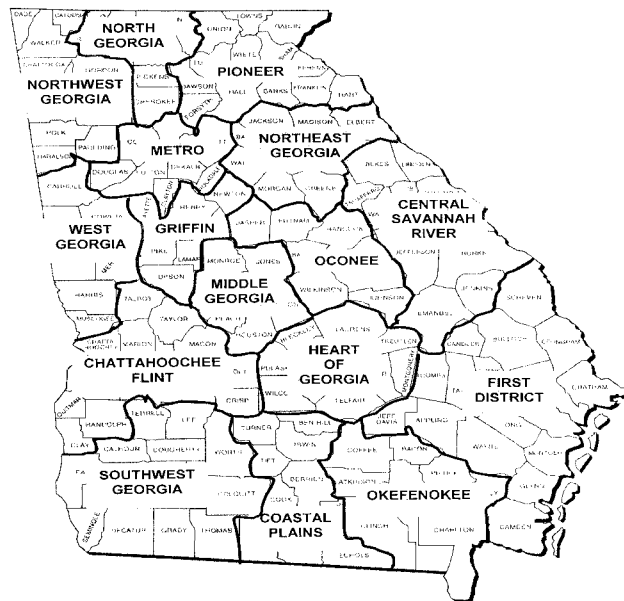
RESA Workforce Counts

A statewide view of the teacher workforce provides an aggregate understanding of supply and demand. However, Georgia is served by a network of Regional Education Service Agencies (RESAs) which provide its member school systems with a variety of educational and training services, including personnel hiring assistance (see Figure 1.9). Since each school system is a member of a RESA, it is convenient to describe the geographical divisions of the state in RESA areas.

Additional Info:

Appendix Item 1.2 provides by RESA the FTE count of educators by personnel categories for FY97 through FY01. And, Appendix Item 1.6 provides the subject/personnel categories of the Georgia educator workforce by RESA for FY97 through FY01.

Figure 1.9. RESA Boundaries



RESAs are defined by geographical (county) boundaries, and not by population balance. Therefore, teacher populations in RESA areas are not balanced (see Table 1.6). In particular, the metropolitan Atlanta RESA (Metro RESA) leads the teacher counts by far, with nearly 36% of Georgia’s teachers.

Table 1.6. Count of Teachers by RESA, FY01

RESA	FY01 Teacher Count	Percent of FY01 Teachers
Central Savannah	4,949	5.2
Chattahoochee	3,647	3.9
Coastal Plains	2,841	3.0
First District	7,982	8.4
Griffin	5,081	5.4
Heart of Georgia	1,648	1.7
Metro	33,870	35.8
Middle Georgia	4,014	4.2
North Georgia	3,886	4.1
Northeast Georgia	4,163	4.4
Northwest Georgia	6,325	6.7
Oconee	1,316	1.4
Okefenokee	1,902	2.0
Pioneer	5,015	5.3
Southwest Georgia	4,460	4.7
West Georgia	3,590	3.8

Out-of-Field Teaching in Georgia’s High Schools

The incidence of out-of-field teaching for the four core academic areas was minimal in Georgia high schools in FY01 (see Table 1.7). The highest percentage of out-of-field teaching assignments occurred in English, where 5% of teachers who taught English did so in at least one class section without certification in the field of English. This 5% represented 167 out of 3,350 high school English teachers statewide.

Table 1.7. Out-of-Field Teaching in Georgia High Schools, FY01

A Teaching Field	B Total Teachers in Grades 9-12 By Field	C Grades 9-12 Teachers Certified in the Assigned Teaching Field		D Grades 9-12 Teachers Who Taught Outside Their Certification Field	
		#	% of B	#	% of B
English	3,350	3,183	95.0	167	5.0
Mathematics	3,016	2,889	95.8	127	4.2
Science	2,746	2,677	97.5	69	2.5
Social Science	2,808	2,687	95.7	121	4.3
Total	11,920	11,436	96.3	484	3.7

High school teachers who taught out-of-field in FY01 were further disaggregated by RESA area (see Table 1.8). No clear regional patterns were exhibited, although Oconee RESA had over 14% of math teachers out-of-field. The next highest out-of-field incidences were in North Georgia RESA with English at 8.9%, First District RESA with social science at 8.8%, and Okefenokee RESA with English at 8.7%.

Table 1.8. High School Out-of-Field Percentages by RESA

RESA	English Out-of-Field Percentage	Math Out-of-Field Percentage	Science Out-of-Field Percentage	Social Science Out-of-Field Percentage
Central Savannah	3.0	5.1	1.2	1.9
Chattahoochee	6.3	4.7	2.7	1.7
Coastal Plains	3.1	2.2	0.0	2.6
First District	3.4	6.4	3.1	8.8
Griffin	3.4	3.4	0.6	5.9
Heart of Georgia	5.0	2.0	2.0	2.2
Metro	6.8	4.4	2.7	4.9
Middle Georgia	4.8	3.8	3.8	2.4
North Georgia	8.9	7.9	5.3	5.1
Northeast Georgia	3.1	3.2	1.0	2.7
Northwest Georgia	2.5	3.7	3.0	2.3
Oconee	4.3	14.3	0.0	4.8
Okefenokee	8.7	1.9	2.0	0.0
Pioneer	1.3	1.3	2.3	4.3
Southwest Georgia	4.1	3.4	1.6	3.7
West Georgia	2.4	0.9	4.7	2.9

Out-of-field Teaching in Georgia's Middle Schools

In past years, the most numerous instances of out-of-field teaching in Georgia occurred in middle grade schools, as reported in [Status Report-2000](#). In addition to the requirement for a concentration of 12 semester or more content course hours in at least two content fields, the PSC has instituted policy changes to modify the testing requirements for middle grade teachers. Effective July 1, 2002, Georgia requires all candidates for middle grades certification and renewal to pass Praxis II content tests in two core fields (i.e., English/Language Arts, Mathematics, Science, and Social Studies). Educator preparation institutions have incorporated the new policy into teacher preparation requirements as well. Out-of-field teaching is expected to be virtually eliminated by the year 2005, with a cautionary prediction in science.

An important reason for the frequency of middle grades out-of-field teaching is the mismatch between demand and supply. Too few middle school teachers have graduated from Georgia's teacher preparation programs with mathematics and science concentrations. Middle grades student teacher production in science and mathematics has not met the hiring need in any year since 1988 when the PSC began collecting supply and demand data. For example, in FY01 Georgia hired over 1,700 middle grade teachers. Georgia teacher education programs produced only 673 middle grade teachers the prior year (FY99).

To identify the agreement between the FY01 course assignments for middle grades teachers and in-field certification concentrations, middle grade teachers who have been issued Georgia certificates listing any core content area(s) were isolated in the CPI file and matched to teaching assignments (see Table 1.9). According to the findings:

- 1,019 middle grade teachers were listed as teaching English and had been issued a certificate listing concentration in any field(s). Of those 1,019 teachers of English, 892 (87.5%) held an English/Language Arts concentration.
- 948 were listed as teaching mathematics and had been issued a certificate listing concentrations. Of those 948 teachers of mathematics, 739 (78%) held a mathematics concentration.
- 598 middle grade teachers with concentrations were reported as teaching social studies. Of those 598 teachers of social studies, 555 (92.8%) held social studies concentrations.
- 556 middle grade teachers with concentrations were reported as teaching science. Of those 556 teachers of science, 424 (76.3%) held science concentrations.

Table 1.9. Out-of-Field Teaching in Georgia Middle Schools, FY01

A Teaching Assignment Field	B Teachers Reported in the FY01 CPI as Assigned to Teach Subject of Column A and who Held <u>Some</u> Field Concentrations	C Teachers in Column B who Held the Specific Concentration Field Matching the Teaching Assignment	D Percent Out-of-Field for Teachers Listed in Column B
English/Language Arts	1,019	892	12.5%
Mathematics	948	739	22.0%
Social Studies	598	555	7.2%
Science	556	424	23.7%

The new PSC certification practice of specifying teaching concentrations on the certificate has made it easy for school systems to know in what area to use a teacher. It is now the school systems' responsibility to ensure in-field assignment of teachers. Apparently, this is still not happening to the extent it should if out-of-field teaching is to be eliminated by 2005, as projected.