



State of Arizona
Department of Education

***Arizona Revised State Plan
and Revised Equity Plan
2007-2008***

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This Highly Qualified Teacher (HQT) report for school year 2007-08 provides information on teacher quality for elementary and secondary schools overall and for the highest poverty quartile and lowest poverty quartile for elementary and secondary schools. In addition, it provides information regarding elementary, middle, and secondary grade levels. The dataset was provided by the Arizona Department of Education (ADE). The only adjustments made to the dataset are described in the report; no data entry errors were corrected, e.g., misspellings or obvious typographical errors.

Data were collected through the Highly Qualified Teacher Position Input application. ADE designed and implemented the Highly Qualified Teacher Position Input application in 2006-2007 to assure increased accuracy for data collection. Using the Highly Qualified Teacher Position Input application, district schools access an employee list rolled over from the previous school year (2006-2007). The local education agency (LEA) verifies the employment list and adds and deletes employees and their positions to reflect their employment status for the current school year (2007-2008). The LEA reports new employee positions and provides data on which criteria are being used to meet HQT status. The data are sent to ADE and cross-checked by ADE staff using the certification database and conducting one-on-one face to face and desk monitoring. Because charter schools are not required to submit the SDER, they must initially generate the employee list. All other steps in the process are identical to the process identified for district schools. A total of 519 LEAs comprised the 2007-2008 dataset with 218 districts and 301 charter schools reporting.

The master dataset provided by ADE for analysis contained 96 reference types. After consultation with ADE staff, the following reference types were used to build the dataset for analysis: school district – unified, school district – high school, school district – accommodation, school district – elementary not in high school, school district – elementary in high school, charter holder – state board, and charter holder charter board. ADE staff also requested that Juvenile Organizations be included in the dataset; however, no records were found for 2007-2008 in the master dataset.

Two sources of poverty level data exist for Arizona schools: data from the Student Accountability Information System (SAIS) and data from the Free and Reduced Lunch (FRL) Report. The SAIS data are self-reported by the local education agencies through an automated software interface and although each SAIS transaction is validated, only inconsistencies in format and business rules are flagged. In other words, even though best efforts are utilized to ensure the accuracy of data being reported, there is no formal monitoring or verification process for SAIS poverty data. Districts are also required to submit data for the National School Lunch Program by reporting free-reduced as a percent of total eligible students. In addition to entry validation, these data submissions are monitored and verified on a random basis by Health and Nutrition Services in Arizona Department of Education's (ADE) Academic Achievement Division. Local Education Agencies selected for monitoring must provide parental documentation of poverty level ensuring accuracy of the poverty level data reported on the Free and Reduced Lunch Report.

A comparison of SAIS and FRL data was conducted in order to determine which poverty dataset should be used for both elementary and secondary school levels in this current analysis. It was determined that the FRL data were more stable since the data are randomly monitored for accuracy. However, further analysis of the FRL data indicated that while the samples of elementary schools yielded 86% of the 1461 elementary schools, only 55% of the 432 secondary schools were represented. By using SAIS data source for poverty level, 95% of the secondary schools were represented. After consultation with ADE staff, it was decided to use FRL data for determining poverty quartiles for elementary schools, and although a less reliable source, it was decided to use SAIS data for the secondary schools in order to increase the sample size. Those schools without either FRL or SAIS data were not included in the data extraction by poverty quartiles.

To arrive at the highest-poverty quartile and lowest-poverty quartile, Arizona schools with poverty data were first separated into two school levels, elementary and secondary from a dataset containing records for 1898 schools, 1461 elementary and 432 secondary schools (both levels include charter schools). It should be noted that five schools were not used due to data entry errors for school type. Using only those elementary schools with FRL poverty data and those secondary schools with SAIS poverty data, data were separately rank ordered from highest to lowest on the poverty measure. The schools in the first (highest group) were designated high-poverty schools and schools in the last group (lowest group) were designated low-poverty schools. The final datasets used for analysis contained 1664 total schools, 1252 elementary and 412 secondary. These datasets are referred to as the “poverty” datasets indicating that only schools with valid poverty data are included in the analysis.

Core Academic Classes Taught by Teachers Who Are Highly Qualified & Not Highly Qualified

The following section contains several tables that provide an analysis of the number of core academic classes taught by all HQ teachers and non-HQ teachers in the highest and lowest poverty schools using poverty data provided by the National School Lunch and Breakfast Programs, Percentage of Free and Reduced 2007 Report for Elementary Schools and student detail data supplied from the Student Accountability Information System (SAIS) for secondary level schools. Table 1a presents the number of core academic classes taught by all teachers in all schools in the “poverty” dataset, the number and percentage of classes taught by teachers who are highly qualified, and by non-HQ teachers in high and low poverty schools at elementary and secondary levels. This table corresponds with the required data for 1.5.1 in the Consolidated State Performance Report (CSPR).

Table 2 presents the number of core academic classes taught by all teachers in all schools in the dataset and by non-HQ teachers in high and low poverty schools at elementary, middle, and secondary levels. Because middle grade core classes are included in both elementary and secondary level schools, Table 2 was created to permit closer examination of the core classes being taught by HQ and non-HQ teachers by grade level: elementary core classes, middle grade core classes (grades 7-8) and secondary level core classes. Middle grade data were compiled from both the elementary and secondary school data by creating a query which extracted only those positions designated as middle grade.

Analysis of School Level Data

Multiple queries were developed to determine which teachers were (1) employed at a school in the elementary poverty dataset and the secondary poverty dataset, (2) were Teacher of Record, or were either a special education or reading specialist, and (3) were either highly qualified or not highly qualified. The criteria ID in the dataset for determining highly qualified included passing the AEPA, having a major, completing 24 semester hours, passing HOUSSE, being a National Board Certified Teacher, having a SPED certificate, having a reading endorsement. The criteria ID also included *not highly qualified*.

At the elementary school level, teachers are considered highly qualified if they pass the appropriate Subject Knowledge AEPA, or earned a minimum of 100 points of the Arizona HOUSSE for Elementary Teachers prior to June 30, 2007, or earned a minimum of 100 points on the AZ HOUSSE for Veteran Teachers Returning to the Profession, or have documentation indicating HQT Reciprocity. HQT data are self-reported and were not accurate for all teachers at the elementary school level for 2007-08. For example, having a major or 24 credit hours in the core academic subject area are not HQ options for elementary teachers, but the data indicated that 144 core academic classes are being taught by teachers who indicated they are highly qualified by these options. Table 6 presents detail of the HQT Qualifying Criteria. Discussions with ADE staff indicate that the data errors were most likely a result of completion of the incorrect teacher attestation form by some teachers. Given these self-reporting errors, the following decision rule was made when developing the query to determine whether or not a teacher was highly

qualified. The query for determining the number of core classes taught by non-HQ teachers used “criteria ID = 8”, in which “8” = not highly qualified. The query for determining the number of core classes taught by HQ teachers used “criteria = 1 or 2 or 3 or 4 or 5 or 6 or 7 or 10”, in which “1” = AEPA, “2” major, “3” 24 semester hours, “4” HOUSSE, “5” = NBCT, “6” = HQT Reciprocity, “7” = SPED certificate, and “10” = reading endorsement. This query permitted capturing the data entry errors made by the self-report when a teacher marked the wrong qualifying criteria, but attested to the factual completion of the form as being *highly qualified*.

Table 1a. Core Academic Classes Taught by HQT & Non-HQT in High and Low Poverty Schools by School Level

School Level	Number of Core Academic Classes (Total)	Number of Core Academic Classes Taught by Highly Qualified Teachers	Percentage of Core Academic Classes Taught by Highly Qualified Teachers	Number of Core Academic Classes Taught by Non-Highly Qualified Teachers	Percentage of Core Academic Classes Taught by Non-Highly Qualified Teachers
	2007-2008	2007-2008	2007-2008	2007-2008	2007-2008
All Schools	266,824	248,456	93.1%	18,368	6.9%
<i>Elementary Level</i>					
High-Poverty	47,855	43,554	91.0%	4,301	9.0%
Low-Poverty	56,278	54,607	97.0%	1,671	3.0%
All Elementary	209,455	195,165	93.2%	14,290	6.8%
<i>Secondary Level</i>					
High-Poverty	7,556	6,917	91.5%	639	8.5%
Low-Poverty	18,675	17,954	96.1%	721	3.9%
All Secondary	57,369	53,291	92.9%	4,078	7.1%

In the quartile of elementary schools with the highest levels of poverty, 9.0% of classes are taught by teachers who are not HQ. In the quartile of elementary schools with the lowest poverty, this percentage is 3.0%.

These results indicate that there is a disparity in the percentages of classes taught by HQ teachers in the high and low poverty elementary schools; that disparity appears to *disadvantage high poverty schools*.

In the quartile of secondary schools with the highest levels of poverty, 8.5% of classes are taught by teachers who are not HQ. In the quartile of secondary schools with the lowest poverty, this percentage is 3.9%. These results indicate that there is a disparity in the percentages of classes taught by HQ teachers in the high and low poverty secondary schools; that disparity appears to *disadvantage high poverty schools*.

Comparison of 2007-2008 School Level Data with 2006-2007 Data

When compared to the school level data reported in 2006-2007, it should be noted that in 2007-2008 more data were available. In 2006-2007, data were reported for 1553 schools; in 2007-2008 data were available for 1664 schools. In addition to more schools being included in the sample, the data in 2007-2008 were more accurate. As noted previously in the 2006-2007 report, some elementary schools, including charter schools, were not accurately reporting “periods taught” in core academic areas in 2006-

2007. In the 2007-2008 report only four districts had data reporting errors in this field and these errors were corrected prior to analyzing the data. The quality of the self-reported data improved in 2007-2008 allowing for more accurate reporting of the results. Table 1b presents a comparison of the data from the 2006-2007 report and the current HQT report.

Table 1b. Core Academic Classes Taught by Non-HQT in High and Low Poverty Schools by School Level (2006-2007 HQT Report)

School Level	RESULTS FROM 2006-2007 HQT REPORT			COMPARISON WITH 2007-2008	
	Number of Core Academic Classes Taught by all Teachers	Number of Core Academic Classes Taught by Non-Highly Qualified Teachers	Percentage of Core Academic Classes Taught by Non-Highly Qualified Teachers	Number of Core Academic Classes (Total)	Percentage of Core Academic Classes Taught by Non-Highly Qualified Teachers
	2006-2007	2006-2007	2006-2007	2007-2008	2007-2008
All Elementary	158,397	8,383	5.29%	209,455	6.8%
High-Poverty	36,768	2,882	7.84%	47,855	9.0%
Low-Poverty	35,632	823	2.31%	56,278	3.0%
All Secondary	47,889	2,550	5.32%	57,369	7.1%
High-Poverty	6,754	377	5.58%	7,556	8.5%
Low-Poverty	8,999	348	3.87%	18,675	3.9%
All Schools	206,286	10,933	5.30%	266,824	6.9%

Analysis of Grade Level Data – 2007 - 2008

Analyses of grade level data are presented in three separate sections (elementary, middle, secondary) on the following pages. Multiple queries were constructed in order to extract the classes designated Middle Grade Science, Language Arts/Reading, Mathematics, and Social Studies from both the Elementary and Secondary master tables, determine the number of core academic classes being taught by all teachers at elementary (without middle), middle, and secondary (without middle), and determine the number of core academic classes taught by non-highly qualified teachers at each of the three grade levels. All queries were run for “all” schools at each grade level and then by high and low poverty quartiles at each grade level. Table 2 presents the results of these queries.

Table 2. Core Academic Classes Taught by Non-HQT in High and Low Poverty Schools by Grade Level

Grade Level	Number of Core Academic Classes Taught by all Teachers	Number of Core Academic Classes Taught by Non-Highly Qualified Teachers	Percentage of Core Academic Classes Taught by Non-Highly Qualified Teachers
Elementary Grades	179,482	11,104	6.2%
High-Poverty	42,066	3,351	8.0%
Low-Poverty	47,620	1,253	2.6%
Middle Grades	30,593	3,273	10.7%
High-Poverty	5,845	969	16.6%
Low-Poverty	8,920	446	5.0%
Secondary Grades	56,749	3,991	7.0%
High-Poverty	7,500	620	8.3%
Low-Poverty	18,413	693	3.8%
Total	266,824	18,368	6.9%
Total High-Poverty	55,411	4,940	8.9%
Total Low-Poverty	74,953	2,392	3.2%

A review of the results in Table 2 indicates a higher percentage of core academic classes being taught by non-highly qualified teachers in the middle grades. In fact, 16.6% of the core academic classes in the middle grade high poverty quartile are being taught by non-highly qualified teachers compared to 8% in elementary grades and 8.3% in secondary grades.

The next set of tables presents the number of core academic classes being taught by non-HQ teachers by subject area. Core Academic Classes tables were constructed for elementary and secondary core classes. For purposes of running queries by school level: elementary, middle, and secondary, a filter for middle school was used to extract middle grade core academics from elementary and from secondary. The results of the extraction formed the middle grade core academics table.

Elementary Core Academic Classes

A table was constructed for purposes of running queries on elementary level. The following subject areas were used for *core academic areas*: Elementary Content Core, English as Second Language, Bilingual, English, General Science, Mathematics, Music, Reading Specialist and Visual Arts. In addition, all special education categories from the elementary level were included.

Table 3. Elementary High and Low Poverty School Core Academic Classes Taught by Non-HQ by Subject

Elementary	All Schools			High Poverty			Low Poverty		
	Non HQ	Total	% of NonH Q	Non HQ	Total	% of NonH Q	Non HQ	Total	% of NonH Q
Elementary Core	6625	140544	4.7%	2176	33409	6.5%	616	37565	1.6%
English Second Lang	166	2413	6.9%	44	545	8.1%	16	497	3.2%
Bilingual	16	268	6.0%	7	180	3.9%	0	12	0.0%
English	17	522	3.3%	3	59	5.1%	0	99	0.0%
General science	6	233	2.6%	5	21	23.8%	0	61	0.0%
Math	14	529	2.6%	7	39	17.9%	0	126	0.0%
Music	486	7651	6.4%	192	1614	11.9%	47	2337	2.0%
Visual Arts	298	4044	7.4%	64	991	6.5%	31	1083	2.9%
Reading Specialist	724	2783	26.0%	209	739	28.3%	12	391	3.1%
Elementary Core Total	8352	158987	5.3%	2707	37597	7.2%	722	42171	1.7%
Special Education									
Cross Categorical	1266	9044	14.0%	287	2125	13.5%	235	2244	10.5%
Early Childhood	412	1732	23.8%	52	196	26.5%	93	545	17.1%
Emotional Disability	208	1332	15.6%	78	344	22.7%	36	347	10.4%
Hearing Impairment	0	89	0.0%	0	13	0.0%	0	46	0.0%
Learning Disability	583	5895	9.9%	125	1176	10.6%	112	1587	7.1%
Mental Retardation	170	1848	9.2%	59	490	12.0%	39	462	8.4%
Orthopedic Imp	0	17	0.0%	0	6	0.0%	0	10	0.0%
Severe/Profound	107	460	23.3%	37	105	35.2%	16	173	9.2%
Visual Impairment	6	78	7.7%	6	14	42.9%	0	35	0.0%
SPED Total	2752	20495	13.4%	644	4469	14.4%	531	5449	9.7%
Elementary Total	11104	179482	6.2%	3351	42066	8.0%	1253	47620	2.6%

When broken down by specific subject area, data indicate that in Arizona’s elementary classrooms (with middle grades extracted), 5.3% of elementary core classes are taught by teachers who do not meet the requirements of HQT. In the quartile of elementary schools with the highest levels of poverty, 7.2% of classes are taught by teachers who are not HQ. In the quartile of elementary schools with the lowest poverty, this percentage is 1.7%. These results indicate that there is a disparity in the percentages of classes taught by HQ teachers in the high and low poverty elementary schools; that disparity appears to *disadvantage high poverty schools*.

It should be noted that no designation was given in the dataset for middle grade special education so no special education is reported in the middle grade table (Table 4). In elementary schools, 13.4% of special education classes are being taught by non-HQ teachers. In the quartile of elementary schools with the highest levels of poverty, 14.4% of special education classes are taught by teachers who are not HQ. In

the quartile of elementary schools with the lowest poverty, this percentage is 9.7%. These results indicate that there is a disparity in the percentages of special education classes taught by HQ teachers in the high and low poverty elementary schools; that disparity appears to *disadvantage high poverty schools*.

Middle Grade Core Academic Classes

As explained previously, the middle grades were extracted from both elementary and secondary schools in order to create the following table.

Table 4. Middle Grade High and Low Poverty School Core Academic Classes Taught by Non-HQ by Subject

	All Schools			High Poverty			Low Poverty		
	Non HQ	Total	%	Non HQ	Total	%	Non HQ	Total	%
MG Language Arts/Reading	921	10226	9.0%	323	3429	9.4%	70	2754	2.5%
MG Mathematics	801	7180	11.2%	235	1280	18.4%	117	2119	5.5%
MG Science	997	6379	15.6%	227	1142	19.9%	166	1976	8.4%
MG Social Studies	554	6883	8.0%	165	1260	13.1%	65	2071	3.1%
Total Middle Core	3273	30668	10.7%	950	7111	13.4%	418	8920	4.7%

The data indicate that all classes in the middle grades are of concern, based on percentages of teachers who are non-HQ are Middle Grade Science (15.6%), Middle Grade Math (11.2%), Middle Grade Language Arts/Reading (9.0%), and Middle Grade Social Studies (8.0%).

In the quartile of middle grades in schools with the highest levels of poverty, 13.4% of middle grade classes are taught by teachers who are not HQ. In the quartile of middle grades in schools with the lowest poverty, this percentage is 4.7%. These results indicate that there is a disparity in the percentages of middle grade classes taught by HQ teachers in the high and low poverty schools; that disparity appears to *disadvantage high poverty schools*. This disparity is seen across all the middle grade core academic areas:

- 19.9% of MG science classes in high poverty schools are taught by non-HQ teachers and 8.4% of the MG science classes in low poverty schools are taught by non-HQ teachers.
- 18.4% of MG math classes in high poverty schools are taught by non-HQ teachers while 5.5% of the MG math classes in low poverty schools are taught by non-HQ teachers.
- 13.1% of MG social studies classes in high poverty schools are taught by non-HQ teachers while 3.1% of the MG math classes in low poverty schools are taught by non-HQ teachers.
- 9.4% of MG language arts/reading classes in high poverty schools are taught by non-HQ teachers while 2.5% of the language arts/reading classes in low poverty schools are taught by non-HQ teachers.

Secondary Core Academic Classes

Table 5. Secondary High and Low Poverty School Core Academic Classes Taught by Non-HQ by Subject

	All Schools			High Poverty			Low Poverty		
	Non HQ	Total	%	Non HQ	Total	%	Non HQ	Total	%
Bilingual	8	33	24.2%	5	11	45.5%	0	3	0.0%
Biology	226	3670	6.2%	37	446	8.3%	40	1214	3.3%
Chemistry	86	1632	5.3%	17	131	13.0%	15	623	2.4%
Earth Science	150	1129	13.3%	20	168	11.9%	19	268	7.1%
Economics	112	800	14.0%	19	111	17.1%	30	316	9.5%
English	487	11917	4.1%	94	1628	5.8%	47	3863	1.2%
English Second Lang	95	1312	7.2%	33	372	8.9%	0	150	0.0%
Foreign Language	199	4325	4.6%	18	355	5.1%	38	1766	2.2%
General Science	182	1586	11.5%	32	314	10.2%	29	439	6.6%
Geography	91	384	23.7%	6	61	9.8%	17	95	17.9%
History	205	6038	3.4%	32	813	3.9%	45	1962	2.3%
Mathematics	737	10843	6.8%	141	1467	9.6%	92	3373	2.7%
Music	55	1732	3.2%	5	129	3.9%	9	677	1.3%
Visual Arts (Art)	78	2472	3.2%	13	241	5.4%	16	828	1.9%
Physics	78	683	11.4%	5	63	7.9%	32	312	10.3%
PolSci/AmeGovernment	174	1499	11.6%	24	243	9.9%	33	402	8.2%
Reading Specialist	45	188	23.9%	7	26	26.9%	23	42	54.8%
Secondary Core Total	3008	50243	6.0%	508	6579	7.7%	485	16333	3.0%
Special Education									
Cross Categorical	527	2599	20.3%	63	404	15.6%	110	721	15.3%
Emotional Disability	32	388	8.2%	4	47	8.5%	10	157	6.4%
Hearing Impairment	0	9	0.0%	0	0		0	0	
Learning Disability	335	2521	13.3%	34	356	9.6%	66	846	7.8%
Mental Retardation	63	809	7.8%	6	98	6.1%	16	272	5.9%
Orthoped Impairment	0	22	0.0%	0	0		0	15	0.0%
Sever/Profound Disability	26	144	18.1%	5	16	31.3%	6	61	9.8%
Visual Impairment	0	14	0.0%	0	0		0	8	0.0%
SPED Total	983	6506	15.1%	112	921	12.2%	208	2080	10.0%
Secondary Total	3991	56749	7.0%	620	7500	8.3%	693	18413	3.8%

When broken down by specific subject area, data indicate that in Arizona’s secondary classrooms (with middle grades extracted), 6.0% of secondary core classes are taught by teachers who do not meet the requirements of HQT. In the quartile of secondary schools with the highest levels of poverty, 7.7% of classes are taught by teachers who were not HQ. In the quartile of secondary schools with the lowest poverty, this percentage is 3.0%. These results indicate that there *is* a disparity in the percentages of classes taught by HQ teachers in the high and low poverty schools; that disparity appears to *disadvantage high poverty schools*.

The same disparity is true for the special education classes as seen in the lower half of Table 5. Approximately 15.1% of special education classes at the secondary level are being taught by non-HQ teachers. The primary areas of concern are:

1. Cross categorical classes (20.3%)
2. Severe/profound disability (18.1%)
3. Learning disability (13.3%)

In the quartile of secondary schools with the highest levels of poverty, 12.2% of the special education classes are being taught by non-HQ teachers compared to 10.0% in the low poverty schools. These results indicate that there *is* a disparity in the percentages of classes taught by HQ teachers in the high and low poverty schools; that disparity appears to *disadvantage high poverty schools*.

Number of Core Academic Classes by Qualifying Criteria

Tables 6 and 7 provide further analysis of the qualifying criteria for HQ teachers by the number of core academic classes taught. As mentioned earlier in this report, HQT data are self-reported and were not accurate for all teachers at the elementary school level for 2007-08. For example, having a major or 24 credit hours in the core academic subject area are not HQ options for elementary teachers, but the data indicated that 144 core academic classes are being taught by teachers who indicated they are highly qualified by these options. Discussions with ADE staff indicate that the data errors were most likely a result of completion of the incorrect teacher attestation form by some teachers. In other words, it is most likely that the teacher is highly qualified because they signed the form attesting to that fact, but simply marked the wrong qualifying entry on the form.

The qualifying criteria also include the HOUSSE. On October 12, 2006, the Arizona Department of Education received approval to extend the use of the HOUSSE until the beginning of the 2007-08 school year. Effective June 30, 2007 Arizona teachers could no longer complete the HOUSSE rubric to meet highly qualified requirements. It should be noted that a teacher may be qualified by more than one criterion; for example, a teacher may be qualified with HOUSSE and 24 semester hours. Therefore, the “total” number of core academic classes taught by HQ teachers by qualifying criteria will not be equal to the total number of core academic classes for elementary, middle, and secondary grade levels found in Tables 2, 3, 4, and 5.

The qualifying for middle, junior high, high schools, visual arts, and music include the following: passed the AEPK Subject Knowledge Test in the core academic subject area or hold an advanced degree in the core academic subject area or hold National Board Certification in the core academic subject area or a major or 24 credit hours in the core academic subject, or earned a minimum of 100 points on the AZ HOUSSE for Middle, Junior High, High School, Visual Arts or Music Teachers prior to June 30, 2007 or earned a minimum of 100 points on the AZ HOUSSE for Veteran Teachers Returning to the Profession or Highly Qualified Reciprocity.

Table 6 breaks down the number of core classes taught by highly qualified teachers by the type of qualifying criteria indicated in the dataset. In the academic core areas for elementary, middle, and secondary grade levels, the majority of classes taught by HQ teachers are taught by those who passed the AEPK.

Table 6. Number of Core Classes Taught by HQ Teachers by Qualifying Criteria

Elementary Grades	24 Sem Hours	AEPA	HOUSSE	HQT Reciprocity	Major	NBCT	Reading Endorsement
Elementary Core	138	74676	55049	4050	6	0	--
English Second Lang	130	772	1234	53	58	0	--
Bilingual	6	99	135	0	7	5	--
English	116	206	67	7	109	0	--
General Science	91	44	33	5	54	0	--
Mathematics	70	238	52	6	149	0	--
Music	1733	2595	1282	131	1408	16	--
Visual Arts	1112	1298	559	89	666	22	--
Reading Specialist	--	--	--	--	--	--	2059
Elementary Core Total	3396	79928	58411	4341	2457	43	2059
Elementary Special Education	24 Sem Hours	AEPA	HOUSSE	HQT Reciprocity	Major	NBCT	SPED Certificate
Cross Categorical	37	3671	1964	229	8	0	1869
Early Childhood	0	15	0	0	0	0	1305
Emotion Disability	10	320	488	36	0	0	270
Hearing Impairment	31	0	12	8	0	0	38
Learning Disability	125	1331	2254	38	18	0	1546
Mental Retardation	17	445	679	24	9	0	504
Orthopedic Impairment	0	0	6	0	0	0	11
Severe/Profound	0	102	109	6	0	0	136
Visual Impairment	0	7	11	8	0	0	46
Elem SPED Total	220	5891	5523	349	35	0	5725
Middle Grades	24 Sem Hours	AEPA	HOUSSE	HQT Reciprocity	Major	NBCT	Reading Endorsement
MG Language Arts/Reading	3074	4004	1219	196	778	34	0
MG Mathematics	934	4252	893	107	187	6	0
MG Science	2404	1469	849	124	536	0	0
MG Social Studies	1879	3037	736	92	498	12	0
Middle Core Total	8291	12762	3697	519	1999	52	0

Secondary Grades	24 Sem Hours	AEPA	HOUSSE	HQT Reciprocity	Major	NBCT	Reading Endorsement
Bilingual	0	19	1	0	5	0	0
Biology	1080	1470	195	12	681	6	0
Chemistry	497	628	194	11	207	9	0
Earth Science	541	84	183	0	171	0	0
Economics	175	228	222	2	56	5	0
English	3243	5586	499	80	1952	70	0
English Second Lang	415	534	89	0	164	15	0

Secondary Grades	24 Sem Hours	AEPA	HOUSSE	HQT Reciprocity	Major	NBCT	Reading Endorsement
Foreign Language	1449	1724	182	14	752	5	0
General Science	827	184	177	9	207	0	0
Geography	76	105	71	0	41	0	0
History	2093	2169	551	17	989	14	0
Mathematics	3247	4721	566	37	1490	45	0
Music	359	608	26	16	668	0	0
Visual Arts (Art)	835	759	84	6	685	25	0
Physics	171	242	81	0	109	2	0
PolSci/AmeGovernment	464	339	324	9	189	0	0
Reading Specialist	0	0	0	0	0	0	143
Secondary Core Total	15472	19400	3445	213	8366	196	143
Secondary Special Education	24 Sem Hours	AEPA	HOUSSE	HQT Reciprocity	Major	NBCT	SPED Certificate
Cross Categorical	150	273	286	15	32	0	1316
Emotional Disability	43	5	98	0	24	0	186
Hearing Impairment	0	0	3	0	0	0	6
Learn Disability	213	232	619	5	8	0	664
Mental Retardation	5	15	48	6	8	0	664
Orthopedic Impairment	0	0	0	0	4	0	18
Sever/Profound Disability	0	3	0	0	0	0	115
Visual Impairment	6	0	0	0	0	0	8
Secondary SPED Total	417	528	1054	26	76	0	2977

Table 7 presents an estimate of the reasons why core academic classes are taught by teachers who are not highly qualified. The following table was completed by using the number of core academic classes taught by teachers who are not highly qualified for both elementary school (14,290) classes and secondary school classes (4,078) from Table 1a as a starting point. Table 7 corresponds to Table 1.5.2 in the Consolidated Report. It should be noted that Arizona charter school teachers are exempt from holding a valid Arizona teaching certificate. Approximately 52% of the charter schools teachers do not hold a valid teaching certificate. The table below did not include “not valid certificate” as the filter for charter schools included in the elementary and secondary levels, but rather used “not highly qualified” in order to provide the estimates. Approximately 2% of the charter school teachers do not hold a Bachelor’s degree.

Table 7. Reasons Core Academic Classes are Taught by Teachers who are not HQT

	Percentage
Elementary School Classes	
Elementary school classes taught by certified general education teachers who did not pass a subject-knowledge test or (if eligible) have not demonstrated subject-matter competency through HOUSSE	53%
Elementary school classes taught by certified special education teachers who did not pass a subject-knowledge test or have not demonstrated subject-matter competency through HOUSSE	19%
Elementary school classes taught by teachers who are not fully certified (and are not in an approved alternative route program)	28%
Total	100%
Secondary School Classes	
Secondary school classes taught by certified general education teachers who have not demonstrated subject-matter knowledge in those subjects (e.g., out-of-field teachers)	47%
Secondary school classes taught by certified special education teachers who have not demonstrated subject-matter competency in those subjects	24%
Secondary school classes taught by teachers who are not fully certified (and are not in an approved alternative route program)	29%
Total	100%

Comparison of Charter Schools and District Schools in Arizona

Core Academic Courses Taught by HQ and Non-HQ Teachers

The following chart provides a comparison of the number of core academic classes taught by both HQ and non-HQ teachers in charter and district schools in Arizona. In order to compile the data for this table, queries were run on schools in the database without using poverty level as a screening criterion. Therefore, the results reported in this table should not be compared to results from tables where poverty level quartiles are being reported. It should also be noted that Arizona charter school teachers are exempt from holding a valid Arizona teaching certificate.

Table 8. Number of Core Classes Taught by Non-HQT and HQT by Type of School

Elementary	CHARTER			DISTRICT		
	Non HQT	HQT	% Non HQT	Non HQT	HQT	% Non HQT
Elementary Core	1148	9624	10.7%	5477	124295	4.2%
English Second Language	12	23	34.3%	154	2224	6.5%
Bilingual	0	4	0.0%	16	248	6.1%
English	9	260	3.3%	8	245	3.2%
General science	1	41	2.4%	5	186	2.6%
Math	7	201	3.4%	7	314	2.2%
Music	27	209	11.4%	459	6956	6.2%
Visual Arts	32	221	12.6%	266	3525	7.0%
Reading Specialist	0	39	0.0%	724	2119	25.5%
Elementary Core Total	1236	10622	11.6%	7116	140112	5.1%
Special Education						
Cross Categorical	40	503	7.4%	1226	7275	14.4%
Early Childhood	0	0	--	412	1320	23.8%
Emotion Disability	0	63	0.0%	208	1061	16.4%
Hearing Impairment	0	8	0.0%	0	81	0.0%
Learning Disability	13	244	5.1%	570	5068	10.1%
Mental Retardation	0	40	0.0%	170	1638	9.4%
Orthopedic Imp	0	0	--	0	17	0.0%
Severe/Profound	0	0	--	107	353	23.3%
Visual Impairment	0	0	--	6	72	7.7%
Elementary SPED Total	53	858	5.8%	2699	16885	13.8%
Total Elementary Classes	1289	11480	11.2%	9815	156997	6.3%
Middle	Non HQT	HQT	% Non HQT	Non HQT	HQT	% Non HQT
MG Language Arts/Reading	41	534	7.1%	880	8771	9.1%
MG Mathematics	53	435	10.9%	748	5944	11.2%
MG Science	86	357	19.4%	911	5025	15.3%
MG Social Studies	48	355	11.9%	506	5899	7.9%
Total MG Core Classes	281	2539	10.0%	5750	42596	11.9%

Secondary	CHARTER			DISTRICT		
	Non HQT	HQT	% Non HQT	Non HQT	HQT	% Non HQT
Bilingual	3	7	30.00%	5	18	21.70%
Biology	39	343	10.20%	185	3101	5.60%
Chemistry	12	126	8.70%	74	1420	5.00%
Earth Science	22	131	14.40%	128	848	13.10%
Economics	22	108	16.90%	90	580	13.40%
English	64	1519	4.00%	423	9911	4.10%
English Second Lang	6	81	6.90%	89	1136	7.30%
Foreign Language	26	308	7.80%	173	3818	4.30%
General Science	6	290	2.00%	176	1114	13.60%
Geography	9	91	9.00%	82	202	28.90%
History	32	819	3.80%	173	5014	3.30%
Mathematics	79	1155	6.40%	658	8951	6.80%
Music	11	186	5.60%	44	1491	2.90%
Visual Arts (Art)	19	230	7.60%	59	2168	2.60%
Physics	19	64	22.90%	59	541	9.80%
PolSci/AmeGovernment	21	261	7.40%	153	1064	12.60%
Reading Specialist	2	1	66.70%	43	142	23.20%
Secondary Core Total	392	5720	6.9%	2614	41519	6.3%
Special Education						
Cross Categorical	40	217	15.60%	487	1855	20.80%
Emotional Disability	0	28	0.00%	32	328	8.90%
Hearing Impairment	0	0		0	9	0.00%
Learning Disability	18	177	9.20%	317	2009	13.60%
Mental Retardation	0	22	0.00%	63	724	8.00%
Orthopedic Impairment	0	4	0.00%	0	18	0.00%
Sever/Profound Disability	0	0		26	118	18.10%
Visual Impairment	0	0		0	14	0.00%
Secondary SPED Total	58	448	12.95%	925	5075	18.23%
Total Secondary Classes	450	6168	7.30%	3539	46594	7.60%
GRAND TOTAL ALL LEVELS	2020	20187	10.0%	19104	246187	7.8%

A comparison of the number of core academic classes being taught by non-HQ teachers in charter schools with those being taught by non-HQ teachers in district schools reveals that overall a higher percentage of core academic classes are being taught by non-HQ teachers in charter schools, 10.0% vs. 7.8%.

Approximately 11.6% of elementary core content is being taught by non-HQT in charter schools compared to 5.1% of elementary core content in district schools. However, a higher percentage of special education classes are being taught by non-HQ teachers in districts than in charter schools, 5.8% vs. 13.8% at the elementary level.

At the middle grade level, 11.9% of the middle grade core classes are being taught by non-HQ teachers in districts as compared to 10.0% in charter schools. Overall, there is very little difference in the percentage of non-HQ teachers teaching core classes between charters and districts at the secondary level. However, a higher percentage of special education classes are being taught by non-HQ teachers in districts than in charter schools, 18.23% vs. 12.95% at the secondary level.