

The Public School Forum's Friday Report

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Volume 7, Issue 22

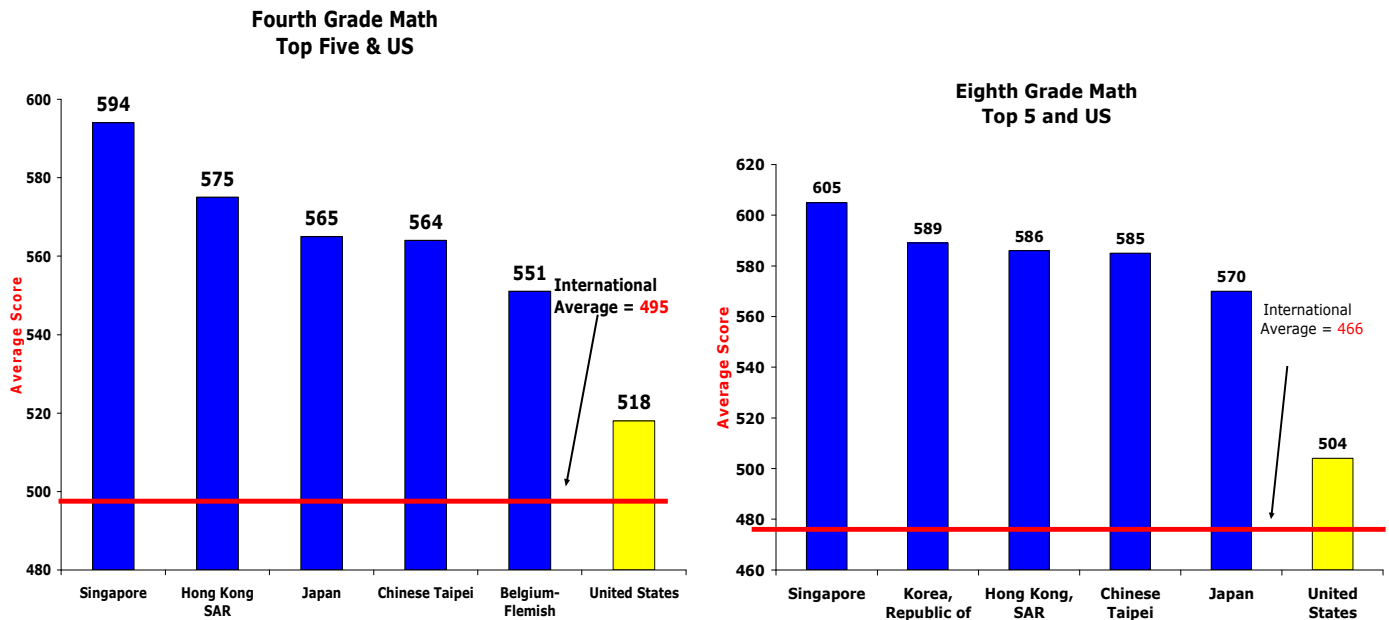
December 17, 2004

US Math Performance Brings Good News & Bad News

“Culturally, I don’t know that the US would ever catch up with the performance of the Asian countries, observed Ina Mullis, a principal author of the 2003 Trends in International Mathematics and Science Study (TIMSS). On the new TIMSS 4th and 8th graders in the U.S. scored above international averages in both math and science on the test. In math, U.S. 4th graders scored an average of 518 and 8th graders scores an average of 504, ranking 12th and 15th respectively. Asian countries continued their domination the mathematics results in both grades (see charts).

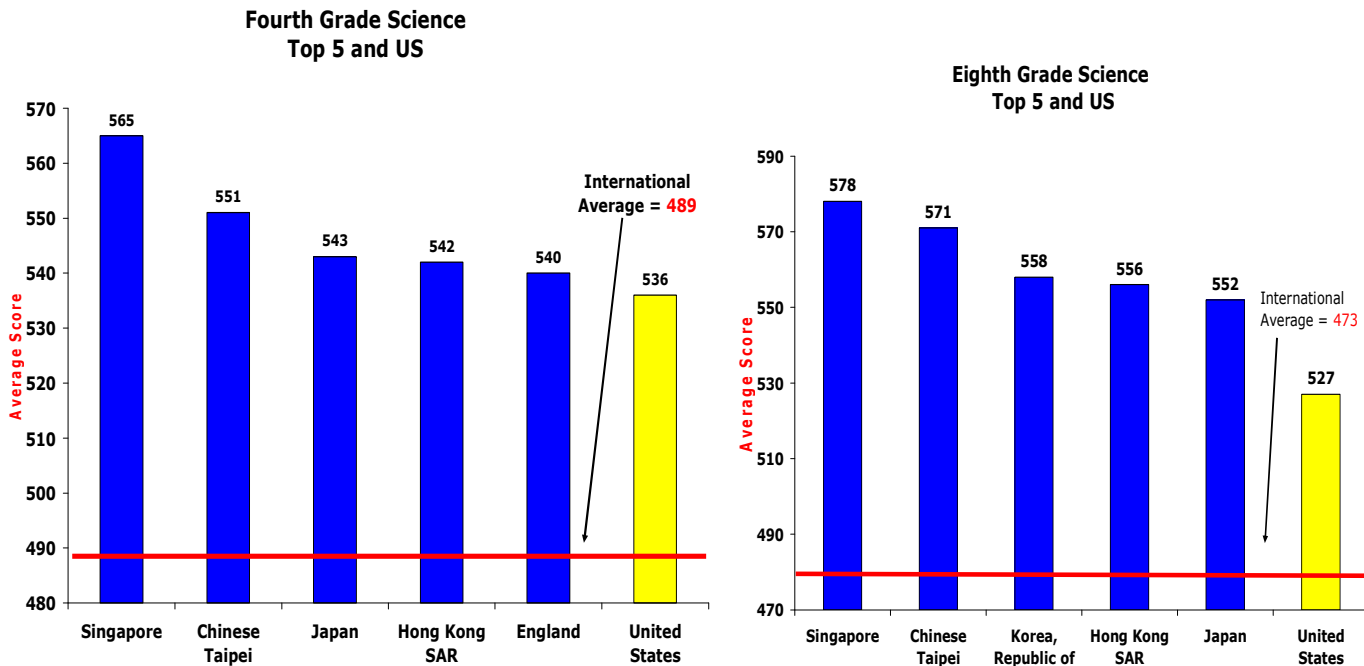
According to the new study, 8th grade students have made significant improvements compared with their international peers, but 4th grade students’ progress may have flattened. U.S. eighth-grade students have improved in both math and science since the 1995 test, including a 12-point scale score increase in 8th grade math and a 15-point scale score increase in 8th grade science; but 4th grade student performance remained flat in math and dropped 6 scale points in science.

This new report was released one week after disappointing PISA 2003 results (See *Friday Report* 12/10/04). The new TIMSS results show a somewhat more encouraging view of math and science performance by the U.S. The TIMSS assessment measures 4th and 8th grade students’ mastery of specific content they have learned in science and math classes, while the PISA looks at 15-year-olds’ ability to apply math skills to real-world contexts.



Source: 2003 TIMMS

The U.S performed better in science in both grades. Fourth graders score an average of 536, and 8th graders score an average of 527, ranking 6th and 9th respectively. Again, Asian countries dominated this category at both grade levels.



Source: 2003 TIMMS

The U.S. Department of Education expressed concern about the flat scores of 4th grade students: “While their scores are better, the fact is they’re not keeping up with their peers in other nations,” said Eugene W. Hickok, the deputy secretary of the U.S. Department of Education. More encouraging were improvements for minority students during the same time period. African American students in both 4th and 8th grades improved in both subjects since 1995. Eighth-grade Hispanic students improved in math and science, though 4th grade results slightly declined in both.

One important factor is the quality of math and science teachers in the U.S: “Only 8 percent of 4th grade math teachers in the US majored or specialized in math during their postsecondary education, compared with Singapore (48 percent) and Hong Kong (37 percent). Eighth-grade American teachers fared better, with almost half completing a math major, compared with Singapore (86 percent), Japan (81 percent), Taiwan (63 percent), and Korea (37 percent),” reports the *Christian Science Monitor*.

For a full copy of the report go to www.nces.gov/pubs2005/timss03

State News . . .

Charlotte Lawyer Answers Manning's Criticism

Luke Largess, one of the attorneys that worked on the *Swann v. Mecklenburg* lawsuit wrote an op-ed piece in response to Judge Manning's November 10 missive regarding Charlotte Mecklenburg high schools. Below are excerpts from a letter published in the *Charlotte Observer*.

Wake doesn't face the same challenges - *Charlotte Observer*

I worry about the conclusions you reach in comparing test scores in Wake and Charlotte-Mecklenburg. You draw conclusions without any comment on, and perhaps without any information about, some dramatic differences between the two districts.

These differences may surprise you, explain the difference in test scores and actually show the critical importance of resources in tackling what are enormous challenges.

There are two major factors at play in Charlotte-Mecklenburg that -- for the time being -- do not impact Wake County.

First, Charlotte-Mecklenburg Schools has been wrenched over the last five years by the end of the Swann desegregation order.

CMS put a "choice" plan in Swann's place that has led to undeniable resegregation of the schools by race and class. Instead of limiting the number of poor students in any one school, like Wake County does, the CMS "choice" plan has concentrated poor minority students in identifiable elementary, middle and high schools that more affluent families avoid like leper colonies.

These schools cannot keep experienced teachers. Many of them struggle to have an adult in each classroom, let alone a qualified teacher. And the "choice" plan has given those involved parents who would try to engage in their children's school a priority right to leave those schools for better ones. The sucking sound from the "choice" plan is audible. It is those schools -- overwhelmingly poor and minority, with all the attendant problems -- that are at the bottom of your list.

Your memo does not begin to weigh the impact of Wake and CMS's polar opposite student assignment policies on each system's test scores. What the data show is not that money does not make a difference, but that CMS has not begun to approach the amount of resources needed to overcome the barriers present in concentrating its poorest students in schools segregated de facto by race and class.

Indeed, the argument could be made that CMS's student assignment method violates Leandro by creating insuperable barriers to educational opportunity for tens of thousands of students in a modern version of a dual school system.

Second, on top of the disastrous effects of resegregation, CMS faces a far greater level of poverty in its student population. You noted in the trial phase the difficulties poverty presented in some of the schools that you found were doing exemplary things educationally, but still could not get more students on grade level.

I understand that about 26 percent of Wake County's students qualify for subsidized lunch. Wake tries to keep each school close to that system-wide percentage.

This year 48 percent of CMS's students qualify. And the assignment plan concentrates the figures; the high schools at the bottom of your list are populated from elementary and middle schools with free-lunch rates of well over 80 percent and 90 percent.

Another statistic has a less dramatic effect, but it certainly causes a blip in ABC data. CMS has almost twice the percentage of students who are not English proficient (almost 10 percent) as does Wake (about 5 percent).

If you assigned a good social scientist to look at the data, I expect you would learn that most of the differences in scores between the two districts are explainable by these differences in the levels of poverty, English proficiency and most of all by the dramatic difference in student assignment. Schools that cannot keep teachers cannot begin to address the education needs of students.

I think you would also find that the differences in scores would be even more pronounced but for the local funding Mecklenburg County provides its schools, some of which goes to reduce class size and offer teachers incentive pay to work in the poorest schools (a policy that is having little impact on teacher turnover).

In short, the data you have relied on to conclude that resources are not the issue, and that no spending spree will come from this case, is not based in the kind of thorough analysis that has been the landmark of this case and led to the richly deserved respect you have gained for your efforts in it.

The state's principal argument on appeal was that you relied too heavily on test scores in deciding whether the constitutional mandate had been met.

The Supreme Court noted at length the other evidence that you relied upon in reaching your conclusions about Hoke County -- dropout rates, evidence from employers about the illiteracy of the Hoke County graduates and the need for remediation of those graduates at the community college and UNC system levels. That is, they found that you did not rely solely on test scores.

But your November memo does. It is a mistake to do so, especially in isolation from any social context. Such an approach is fraught with problems, some of which I hope this letter illustrates, and risks oversimplifying the issues.

It has taken years of your hard and thoughtful work to get the parties to this point and to get the attention of the legislature. Now is not the time for us to miss the realities of the problems we all face by relying on limited data.

DPI Releases Updated DSSF Variables

The Department of Public Instruction staff has released updated data associated with the three “community variables” used in the state’s Disadvantaged Student Supplemental Fund (DSSF) proposal. A previous version did not isolate data for public school students, but included all children. In addition, the state has provided links to the data provided by the Census Bureau and National Center for Education Statistics so interested parties can examine the data. Below are all school districts with their percentage of student above Level III and the percentage of students affected by the three variables.

Last week at their winter meeting, the NC Association of School Administrators expressed support that the DSSF formula was a “step in the right direction” to meet the court mandates, with a number of caveats that called for additional information:

1. That the questions concerning the sources and determination of the percentages for the DSSF’s proposed student characteristics be satisfactorily addressed by the State;
2. That any funds the State directs to the proposed DSSF in the future be non-supplanting of existing public school funds and categorical allotments, specifically including Low Income Family, At-Risk Students, Small County, Low Wealth County, Limited English Proficient, Academically Gifted, Vocational Education, and Special Learning Issues. These programs should continue, and their funding should be increased as necessary to ensure they adequately meet the needs they are designed to address.
3. That the 16 pilot school systems currently receiving DSSF allocations should continue to be funded at their current level or more to allow for evaluation of the effectiveness of the programs funded.
4. That further discussions are required regarding the potential use of ability-to-pay criteria regarding the distribution of appropriations to the DSSF fund.

LEA	Percent of Students Level 3 and Above	Percent of Public School Students Living in a Single Parent Family	Percent of Population Age 5-17 Below Poverty Line	Percent of Public School Students Who Have at Least One Parent with Less Than High School Degree	Index Value (Percent or Relative Disadvantaged from the State Mean)	Percent of ADM used for Disadvantaged Funding (24.13% plus Index Value)
Alamance-Burlington	75.70	23.43	12.00	17.91	-2.65	21.48%
Alexander County	79.10	17.12	13.84	20.39	-2.91	21.22%
Alleghany County	82.50	11.62	20.04	20.76	-1.95	22.18%
Anson County	63.50	35.28	21.84	21.18	4.15	28.28%
Ashe County	87.00	14.86	20.43	18.71	-1.53	22.60%
Avery County	84.30	14.96	20.75	19.00	-1.34	22.79%
Beaufort County	75.60	25.45	22.20	19.93	1.76	25.89%
Bertie County	65.50	36.07	27.92	26.41	7.57	31.70%
Bladen County	70.50	33.42	23.01	20.13	3.90	28.03%
Brunswick County	76.70	24.57	20.56	17.82	0.53	24.66%
Buncombe County	85.20	17.32	13.66	13.86	-4.37	19.76%
Asheville City	76.00	36.53	27.72	11.46	4.32	28.45%
Burke County	82.40	17.85	15.46	28.85	-0.33	23.80%

LEA	Percent of Students Level 3 and Above	Percent of Public School Students Living in a Single Parent Family	Percent of Population Age 5-17 Below Poverty Line	Percent of Public School Students Who Have at Least One Parent with Less Than High School Degree	Index Value (Percent or Relative Disadvantaged from the State Mean)	Percent of ADM used for Disadvantaged Funding (24.13% plus Index Value)
Cabarrus County	84.10	16.46	9.45	12.29	-6.35	17.78%
Kannapolis City	72.10	24.57	15.94	26.43	0.84	24.97%
Caldwell County	84.10	21.14	15.53	24.66	-0.48	23.65%
Camden County	87.90	18.88	16.73	7.60	-4.33	19.80%
Carteret County	85.60	23.32	17.58	10.63	-2.36	21.77%
Caswell County	76.20	20.81	17.99	18.69	-1.02	23.11%
Catawba County	83.00	15.08	10.95	18.84	-4.71	19.42%
Hickory City	77.20	24.97	17.60	19.45	-0.04	24.09%
Newton Conover City	78.70	36.62	13.57	24.42	2.33	26.46%
Chatham County	80.70	15.83	11.36	18.39	-4.50	19.63%
Cherokee County	87.30	14.66	22.80	18.34	-0.84	23.29%
Edenton/Chowan	76.10	33.19	25.44	15.10	3.57	27.70%
Clay County	84.70	11.31	20.48	21.46	-1.72	22.41%
Cleveland County	82.00	24.83	17.08	20.36	-0.05	24.08%
Columbus County	69.50	26.81	24.96	22.30	3.54	27.67%
Whiteville City	72.60	37.35	24.24	19.25	5.02	29.15%
Craven County	82.80	25.48	19.18	12.87	-0.83	23.30%
Cumberland County	76.70	27.82	20.52	10.06	-0.45	23.68%
Currituck County	89.60	20.92	16.14	18.50	-1.67	22.46%
Dare County	87.30	16.67	12.46	8.14	-6.19	17.94%
Davidson County	85.30	14.17	10.22	15.85	-5.83	18.30%
Lexington City	64.30	41.06	22.71	30.68	7.86	31.99%
Thomasville City	64.10	28.50	17.30	30.30	3.05	27.18%
Davie County	86.10	17.50	10.10	12.51	-5.84	18.29%
Duplin County	75.60	20.32	21.66	26.65	1.88	26.01%
Durham County	71.20	30.45	17.03	13.69	-0.25	23.88%
Edgecombe County	66.40	32.58	22.91	20.11	3.67	27.80%
Forsyth County	74.50	24.42	14.55	12.29	-2.79	21.34%
Franklin County	72.80	21.71	17.76	19.98	-0.61	23.52%
Gaston County	78.50	21.89	15.79	22.11	-0.78	23.35%
Gates County	75.70	16.69	20.88	15.38	-1.69	22.44%
Graham County	85.40	16.47	24.74	25.78	1.87	26.00%
Granville County	76.10	26.75	15.53	19.21	-0.40	23.73%
Greene County	72.30	32.11	20.04	29.04	4.54	28.67%
Guilford County	77.20	24.66	14.78	12.54	-2.60	21.53%
Halifax County	67.10	41.53	33.65	27.90	11.11	35.24%
Roanoke Rapids City	76.90	23.75	15.11	12.79	-2.64	21.49%
Weldon City	51.10	51.30	26.69	21.36	9.51	33.64%
Harnett County	75.50	26.03	18.54	15.30	-0.39	23.74%
Haywood County	81.70	18.53	19.01	14.10	-2.20	21.93%
Henderson County	85.40	17.88	16.97	15.41	-2.76	21.37%
Hertford County	61.30	32.68	28.85	17.80	5.22	29.35%

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Hoke County	66.40	28.44	22.08	17.97	1.97	26.10%
Hyde County	73.50	27.02	30.68	17.98	4.60	28.73%
Iredell-Statesville	79.70	17.50	12.15	13.61	-4.90	19.23%
Mooresville City	85.10	19.22	12.15	12.27	-4.80	19.33%
Jackson County	77.80	20.51	19.83	11.77	-1.98	22.15%
Johnston County	81.40	17.91	15.71	17.66	-2.69	21.44%
Jones County	81.90	26.70	24.13	21.72	3.10	27.23%
Lee County	78.30	21.37	17.63	20.01	-0.72	23.41%
Lenoir County	77.70	32.21	23.22	19.95	3.65	27.78%
Lincoln County	80.60	14.96	15.26	21.11	-2.76	21.37%
Macon County	83.60	20.68	18.63	14.41	-1.77	22.36%
Madison County	79.80	18.91	21.64	18.84	-0.16	23.97%
Martin County	72.30	31.13	25.65	18.79	3.99	28.12%
McDowell County	80.10	17.93	14.76	20.38	-2.41	21.72%
Charlotte-Mecklenburg	75.60	24.40	13.05	11.25	-3.54	20.59%
Mitchell County	79.10	13.76	17.88	22.07	-1.92	22.21%
Montgomery County	68.20	22.28	21.35	32.65	3.54	27.67%
Moore County	82.50	20.53	16.41	16.13	-2.19	21.94%
Nash-Rocky Mount	74.80	26.47	20.34	19.95	1.36	25.49%
New Hanover County	84.00	23.59	17.43	10.31	-2.42	21.71%
Northampton County	63.80	37.64	29.16	25.45	8.15	32.28%
Onslow County	85.30	18.97	19.07	10.80	-2.80	21.33%
Orange County	81.10	19.07	11.92	15.37	-4.23	19.90%
Chapel Hill-Carrboro	88.80	18.91	12.74	4.82	-6.31	17.82%
Pamlico County	83.40	23.53	23.98	16.86	1.26	25.39%
Pasquotank County	71.90	32.93	24.36	12.50	2.57	26.70%
Pender County	81.70	17.81	20.97	17.53	-0.93	23.20%
Perquimans County	79.00	29.93	28.62	17.71	4.50	28.63%
Person County	80.50	22.19	16.31	18.48	-1.33	22.80%
Pitt County	75.30	27.63	21.68	15.31	1.06	25.19%
Polk County	88.30	13.96	12.59	14.44	-5.37	18.76%
Randolph County	80.10	15.84	11.29	22.46	-3.62	20.51%
Asheboro City	75.10	18.30	15.98	25.78	-0.72	23.41%
Richmond County	72.00	30.96	22.90	19.09	3.07	27.20%
Robeson County	67.80	35.03	25.82	27.92	6.95	31.08%
Rockingham County	75.90	20.32	16.25	22.94	-0.79	23.34%
Rowan-Salisbury	78.40	21.14	15.78	16.95	-2.09	22.04%
Rutherford County	80.30	21.16	18.36	23.83	0.32	24.45%
Sampson County	76.90	21.27	19.76	24.58	0.99	25.12%
Clinton City	78.30	34.40	26.79	13.73	4.01	28.14%
Scotland County	75.10	30.70	22.88	20.73	3.36	27.49%

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Stanly County	80.40	16.71	14.69	18.70	-3.09	21.04%
Stokes County	79.90	16.42	13.31	17.86	-3.81	20.32%
Surry County	82.70	14.29	16.10	26.52	-1.43	22.70%
Elkin City	85.80	15.11	17.15	20.00	-2.32	21.81%
Mount Airy City	84.90	18.34	16.21	20.93	-1.70	22.43%
Swain County	80.90	18.28	31.10	15.86	2.29	26.42%
Transylvania County	89.20	17.67	18.51	11.48	-3.14	20.99%
Tyrrell County	82.80	38.37	31.48	18.45	7.57	31.70%
Union County	83.40	14.96	12.85	13.06	-5.36	18.77%
Vance County	62.70	37.50	25.37	26.13	6.96	31.09%
Wake County	85.30	17.23	10.13	7.14	-7.08	17.05%
Warren County	67.30	32.91	29.42	24.81	7.02	31.15%
Washington County	57.40	35.01	26.84	22.95	6.20	30.33%
Watauga County	90.50	14.61	15.01	11.51	-5.04	19.09%
Wayne County	74.70	27.82	20.46	13.08	0.19	24.32%
Wilkes County	81.30	14.45	17.13	24.77	-1.43	22.70%
Wilson County	80.90	32.20	23.68	21.34	4.12	28.25%
Yadkin County	78.00	14.07	13.93	19.78	-3.71	20.42%
Yancey County	84.70	13.83	21.56	19.95	-1.11	23.02%

Percent of ADM Used for Disadvantaged Funding

Compute the State average percentage of students performing below grade level on the ABCs, using data from each of the last 5 years. Use this average as a fixed variable that relates to the average percentage of disadvantaged students in North Carolina’s public schools. This average, which shall be known as the **State Average Disadvantaged Percentage**, is 24.13%.

Add or subtract each LEA’s percent deviation, per the **Index**, from the fixed **State Average Disadvantaged Percentage**. For example, the LEA with the highest concentration on the index is 14% higher than the **State Average Disadvantaged Percentage**; therefore, the calculated **Disadvantaged Population Percentage** for this LEA (Halifax County) would be 35.24% (24.13% + 11.11%). The **Disadvantaged Population Percentage** for the lowest concentration (Wake County) would be 17.05% (24.13% – 7.08%).

For more information, go to www.ncpublicschools.org/fbs

National News . . .

Teacher Quality Issues Threatens California Education Goals

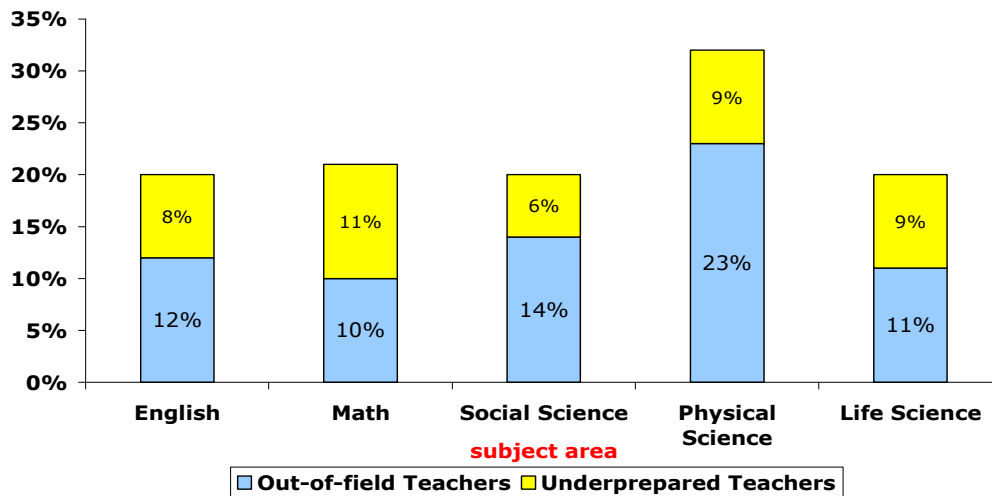
A new report from the Center for the Future of Teaching and Learning (CFTL), *California’s Teaching Force 2004: Key Issues and Trends*, contends that large numbers of secondary teachers are assigned to teach classes out of their subject field, growing numbers of teachers are retiring, and repeated cutbacks to the state’s system of teachers are being made. These factors threaten California’s

ability to meet students’ needs and fulfill rapidly escalating state and federal education requirements: “California has raised the stakes, but cut the teacher pipeline,” said Margaret Gaston, CFTL Director. Key findings include:

- More than 20% of high school English, math and science teachers are either teaching out of the field or without a credential. (see chart)
- The rapid student enrollment in the past few years is about to reach middle and high schools at the same time tens of thousands of teachers are preparing to retire.
- More than \$300 million has been cut from the state’s system of teacher recruitment and development.
- Children in schools with large numbers of minority students are 5 times more likely to have an unqualified teacher.
- 20,000 teachers with emergency permits, pre-intern certificates, and waivers would not be eligible to teach in 2006, under federal requirements.

Overall the report found significant shortages of teachers prepared to help all students meet increased state and national goals for academic achievement. The report did find that the state has significantly reduced the number of teachers without any teaching credential; although, the projections show this improvement may be short lived. The report also offers recommendations for strengthening California’s teaching workforce.

**Out-of-Field and Underprepared HS Teachers
2003-04**



Source: Center for the Future of Teaching and Learning, *California's Teaching Force 2004*

For a full copy of the report go to www.cftl.org

Forum News . . .

Happy Holidays

The Forum offices will close December 23 and reopen on Monday, January 3, 2005. The *Friday Report* will resume publication on January 7, 2005.

Have a wonderful holiday season!

The *Friday Report* is published weekly by the Public School Forum of NC and is distributed to Forum Board members, legislators active in education policy, the press, and Forum subscribers. Archived editions can be found at www.ncforum.org/doclib