



IOWA KIDS COUNT

SPECIAL REPORT

JANUARY 2010

This *Kids Count Special Report* was researched and written by Charles Bruner and Michael Crawford of the Child and Family Policy Center (CFPC). It updates two earlier CFPC reports prepared for the Iowa Fiscal Partnership - *No Longer a Leader* and *Securing Iowa's Economic Future*.

Is Iowa Educationally Competitive? *Children and Iowa's Economic Future*

Introduction

Ultimately, the growth of Iowa's economy will be dependent upon an increasingly well-educated workforce. As Iowa competes in the national and world economy, education is key.

Iowans pride themselves on their state's overall level of literacy and educational quality. Indeed, Iowa has one of the highest literacy and high-school completion rates in the country. This, however, only tells part of the story of the educational status of Iowa's population and the achievement of its students.

In 1991, the Child and Family Policy Center (CFPC) titled its first Iowa Kids Count Data Book *World-Class Futures*. That year, Iowa ranked eighth among states in the national Kids Count Data Book, and the report warned against complacency. *World-Class Futures* drew comparisons between Iowa's child outcomes and those for some of America's major trading partners and competitors – Canada, Great Britain, France, and Japan – to show that Iowa should not rest on its laurels if it wanted to compete, and excel, in an increasingly international economy. Although Iowa fared well among American states, it lagged behind these countries on a number of indicators of child health and well-being, particularly in terms of student educational achievement.

World-Class Futures itself was a reference to a Gubernatorial report, *World Class Schools*, that set out an agenda to make Iowa's school system a model for the nation. In his last term in office (1994-98), Gov. Terry Branstad focused upon significant education reforms and investments designed to be part of his legacy. His successor, Gov. Tom Vilsack, followed this up with additional education initiatives to make Iowa's educational system more competitive with other states, including additional funding for teacher salaries and establishing a goal that 90 percent of all high-school students pursue post-secondary education. In his first term in office, Gov. Chet Culver has initiated additional actions to bring Iowa teacher salaries up to the national average and established Preschool for All, an early-childhood program designed to make voluntary preschool available to all Iowa four-year-olds.

With such attention from Iowa's last three governors on education reform and excellence, one might assume that Iowa's education system would have moved forward over the last 20 years, both in its own right and in comparison with other states. Two 2006 Iowa Fiscal Partnership (IFP) reports, however, provided information that has challenged this assumption and pointed to the need for Iowa lawmakers to seriously reassess the status of Iowa's educational system. The 2007 and 2009 data analyzed in this update support those findings and show that, despite recent investments, Iowa students are not keeping up with their counterparts in other parts of the world, or in other states.

Securing Iowa's Economic Future: The Education Level of Iowa's Adult Workforce

In January 2006, the IFP report, *Securing Iowa's Economic Future: Strengthening Skills, Work Supports and Economic Security for Working Families* (available at iowafiscal.org), described the educational characteristics of Iowa's adult population, including the overall education level of working-age Iowans.

Iowa lags nationally in the proportion of adults with a bachelor's degree. While 28.6 percent of the country's 25- to 64-year-olds have college degrees, only 24.8 percent of Iowans do. Closing that gap of 3.8 percent would require that 56,211 more Iowans from the current 25-64 population obtain undergraduate degrees.

Securing Iowa's Economic Future, page 10

the information age is increasingly dependent upon higher education levels and skills. A high-school diploma is no longer sufficient to ensure economic self-sufficiency.

In comparison with other states (here using the total population 25 years and over), in 2000 Iowa ranked 11th among states on high-school-graduation rates, but ranked 38th on college degrees and 43rd on graduate degrees.

The reasons for these disparities can be attributed, in some part, to the out-migration of younger Iowans who complete college, but this does not account for all of the difference. Iowa also has a much smaller immigrant and minority population than the United States as a whole, which tends to be less educated.

Table One: Iowa and U.S. Educational Attainment, Ages 25-64, 2000.

	Iowa		United States	
	Number	Percent	Number	Percent
Total Age 25-64	1,479,241		150,498,956	
Less Than High School Diploma	122,569	8.3%	20,297,155	13.5%
High School Diploma/GED	508,175	34.4	43,439,391	28.9
Some College, No Degree	328,996	22.2	31,898,206	21.2
Associate Degree	152,905	10.3	11,825,487	7.9
Bachelor's Degree	259,153	17.5	27,709,564	18.4
Graduate or Professional Degree	107,443	7.3	15,329,153	10.2

Source: U.S. Census

The report noted that Iowans were "educated to a point," with higher rates of high-school completion among the adult workforce than in the country as a whole. However, Iowa's adult workforce has substantially lower rates of college completion for four-year and advanced degrees than in the country as a whole. *Securing Iowa's Economic Future* pointed to the need for additional attention on and investments in education for Iowa to be economically prosperous in the 21st century. It noted that wage advancement over the last 20 years has occurred only for persons with college degrees or above, and that Iowa's and the country's economic growth in

The disparities would be even greater if only white, non-Hispanic adults were represented in the table.

No Longer A Leader: Iowa's K-12 Education System and Student Achievement

In November 2006, IFP produced a second report describing trends in primary and secondary educational achievement in the state. *No Longer A Leader? Investments and Student Achievement in Iowa* drew upon available student achievement

scores that provide some level of comparison across states.

National Assessment of Educational Progress (NAEP) scores represent the best comparative data across states and over time available on student achievement. NAEP, administered by the National Center for Education Statistics, has tested statistically representative samples of students in each of the 50 states on a periodic basis since 1992. It tests fourth- and eighth-graders in reading, mathematics and science proficiency. The NAEP scores also provide for some comparisons by different student subgroups, including white, African-American and Hispanic students.

No Longer A Leader showed that Iowa's overall ranking among states declined from 1992, when Iowa placed among the very top states, to 2005, when it placed within the top third overall. This drop occurred in large measure because Iowa's NAEP scores had remained largely the same, while other states had produced significant gains. *No Longer A Leader* provided in-depth examination of scores on fourth-grade reading and eighth-grade mathematics, which represent two sentinel measures for student achievement. Table Two, reproduced from *No Longer A Leader*, shows Iowa's rankings among states on the percent of students deemed proficient by grade.

	4 th Grade Reading	
	<u>1992</u>	<u>2005</u>
Iowa	36%	33%
United States	27%	30%
Iowa Ranking	T2	T19
	8 th Grade Mathematics	
	<u>1992</u>	<u>2005</u>
Iowa	31%	34%
United States	20%	28%
Iowa Ranking	T1	T13

Source: National Center for Education Statistics

Table Two shows how Iowa's ranking among states declined substantially over this period – from being tied for second in fourth-grade-reading proficiency to being tied for 19th, and from being tied for first in eighth-grade-mathematics proficiency to being tied for 13th.

As with the data on adult educational attainment,

When NAEP scores are broken out by race, Iowa's overall above-average ranking among states disappears. Iowa's overall scores may seem "better than average," but only because Iowa has a very small minority student population – not because scores indicate Iowa does a better job educating either its white students or its African-American and Hispanic students. Iowa voters are right to be concerned that Iowa's educational system has "gotten off on the wrong track."

***No Longer A Leader*, page 10**

however, these comparisons also reflect differences in student composition. While Iowa has grown more diverse, it still has a much smaller minority-student population than most other states, and population changes during this period were smaller. When comparing only the scores of white students, *No Longer A Leader* showed that Iowa's overall ranking among states was actually substantially lower. From 1992 to 2005, the performance of white students – constituting nearly 90 percent of all students in Iowa – moved from among the top states to the bottom half. For instance, on fourth-grade reading, the state's scores declined from sixth place among states in 1992 to 35th place in 2005.

	<u>1992</u>	<u>2005</u>
4th Grade Reading		
Iowa	37%	36%
United States	33%	39%
Iowa Ranking	T6	T35
8th Grade Mathematics		
Iowa	32%	36%
United States	25%	37%
Iowa Ranking	T1	T26

Source: National Center for Education Statistics

These figures appear in contrast to the annually reported high ranking Iowa graduating seniors receive on both ACT and SAT college entrance examinations – rankings that generally shows Iowa near the top among states. *No Longer A Leader* also provided an analysis of ACT and SAT scores by comparing Iowa with states that made similar use of these examinations. These showed that Iowa's gains over the last two decades have been well below those of

comparable states and that Iowa's actual scores do not fare as well against states.

Finally, *No Longer A Leader* examined overall trends in Iowa's investments in K-12 education over this same general period, and showed that on both per-pupil expenditures and teacher salaries, Iowa's investments not only were below the national average but also lagged overall investment growth during this period. While not the only explanation for the decline in student achievement, educational investments played a role.

No Longer A Leader Update: Most Recent NAEP Scores

Since publication of *No Longer A Leader*, there have been two more releases of NAEP data: reading-proficiency results in 2007 and mathematics-proficiency results in 2009.

Responding to the 2009 NAEP scores in fourth- and eighth-grade mathematics, the *Des Moines Register* argued that lawmakers should be concerned.

The concern is not just that students in a number of other states outperform Iowa's kids, who used to be stars on the National Assessment of Educational Progress. It's that as business leaders call for students to be prepared to keep this country globally competitive, Iowa is turning out a smaller share of students at the advanced levels in math than many other states. ... Yes, Iowa students perform above average. But that is not good enough.

~November 2, 2009 editorial *Pay Attention to Iowa Kids' Math Scores*

The *Des Moines Register* editorial also noted the significant achievement gap that existed between white and African-American and Hispanic students. While the *Register's* attention to these "worrisome" results is important, the *Register's* analysis did not include the type of analysis conducted in *No Longer A Leader* – analysis showing that the racial makeup of students in Iowa, compared with the U.S. as a whole, disguises the severity of the problem.

This update to *No Longer A Leader* includes information on both fourth- and eighth-grade reading and mathematics scores from 1992 to the present, for all students, and for white students.

Fourth-grade reading scores represent a sentinel

While Iowa has had a number of public-education initiatives during this period, overall investments in public education have not kept pace with the country as a whole, either on a per-pupil basis or as reflected in teacher salaries. [Between 1991 and 2004], Iowa moved from 27th to 36th on per-pupil expenditures and 32nd to 40th on teacher salaries. Per-pupil spending declined by nearly 10 percent in relation to per-pupil spending in the nation as a whole.

***No Longer A Leader*, pages 2 and 3**

measure of student achievement because the early-elementary grades focus on helping students acquire reading proficiency. After fourth grade, much education is dependent upon reading. In other words, in early-elementary grades, students "learn to read." In subsequent years, they "read to learn." Poor reading skills at the end of fourth grade are a strong predictor of future school problems. Table Four provides both fourth- and eighth-grade reading scores for all students and for white students in each year NAEP scores are available. The average score is provided in this table because it facilitates overall ranking of Iowa among states.

Table Four (on page 5) shows that Iowa's scores have remained largely the same over this entire period, while the average scores in other states have advanced. While Iowa was among the top states in 1992 on fourth-grade reading, Iowa's ranking declined by 10 states for all students and by 25 states for white students. In 2007, Iowa actually ranked in the bottom third of all states for white students on fourth-grade reading.

Eighth-grade mathematics scores also represent a sentinel measure of student achievement. A large share of jobs in America, even in the trades, require basic skills in mathematics, and students who have not achieved higher-level mathematics skills by eighth grade face substantial challenges in acquiring them later. Table Five (on page 5) provides both fourth- and eighth-grade mathematics scores for each of the years NAEP scores are available, including the 2009 scores upon which the *Des Moines Register* editorial was based.

Table Five shows an even greater decline in mathematics test scores among the Iowa student population. While Iowa was a clear leader among states in 1992, it was average, at best, in 2009. The most disconcerting drop is in Iowa's eighth-grade mathematics scores among white students, which declined from first in the nation in 1992 to 39th in the nation in 2009. While eighth-grade mathematics

Table Four: National Assessment of Educational Progress Scores

	4 th Grade Reading			White Students		
	All Students			White Students		
	<u>Iowa</u>	<u>US</u>	<u>Iowa Rank</u>	<u>Iowa</u>	<u>US</u>	<u>Iowa Rank</u>
1992	225	217	5th	226	224	9th
1994	223	214		224	224	
1998	220	215		222	225	
2003	223	218		226	229	
2005	221	219		224	229	
2007	225	221	15th	227	231	34th
Change	+0	+4		+1	+7	

	8 th Grade Reading			White Students		
	All Students			White Students		
	<u>Iowa</u>	<u>US</u>	<u>Iowa Rank</u>	<u>Iowa</u>	<u>US</u>	<u>Iowa Rank</u>
1992	-----	260		-----	267	
1994	-----	260		-----	267	
1998	-----	263		-----	270	
2003	268	263	12th	269	272	24th
2005	267	262		269	271	
2007	267	263	12th	270	272	28th
Change	-1	+3		+1	+5	

Source: National Center for Education Statistics

Table Five: National Assessment of Educational Progress Scores

	4 th Grade Mathematics			White Students		
	All Students			White Students		
	<u>Iowa</u>	<u>US</u>	<u>Iowa Rank</u>	<u>Iowa</u>	<u>US</u>	<u>Iowa Rank</u>
1992	230	220	2nd	231	227	7th
1996	229	224		230	231	
2000	231	226		233	234	
2003	238	235		241	243	
2005	240	238		242	246	
2007	243	240		245	248	
2009	243	240	19th	245	248	35th
Change	+13	+20		+14	+21	

	8 th Grade Mathematics			White Students		
	All Students			White Students		
	<u>Iowa</u>	<u>US</u>	<u>Iowa Rank</u>	<u>Iowa</u>	<u>US</u>	<u>Iowa Rank</u>
1992	283	268	1st	284	277	1st
1996	284	272		285	281	
2000	-----	273		-----	284	
2003	284	278		287	288	
2005	284	279		286	289	
2007	285	281		288	291	
2009	284	283	27th	287	293	39th
Change	+1	+15		+3	+16	

Source: National Center for Education Statistics

The most disconcerting drop shown is for eighth grade mathematics scores among white students, which declined from Iowa being 1st in the nation in 1992 to 39th in the nation in 2009.

scores have risen dramatically in the U.S. as a whole, in part because policymakers have recognized that students need increased mathematical skills to compete in the job market, Iowa's have remained stagnant.

Conclusion: Beyond Business As Usual

"Iowans are number one in thinking we're number one in education," one state senator noted in reviewing this data. "But that's simply not true." Clearly, these figures run counter to what most Iowans believe about the state's educational system. While Iowans place a high value on literacy and education, and are concerned about the direction of education, there has not yet been an understanding that Iowa's education system no longer leads the nation, and that the state needs leadership to regain its educational footing.

The trends shown in this update have no simple cause or explanation. As *Securing Iowa's Economic Future* showed, the adult workforce – including the parents of children being taught in Iowa schools – is less likely to be highly educated in terms of college or graduate degrees. Some states have taken more steps than Iowa to institute statewide standards and expectations for student achievement. Others have set new incentives and accountability standards to promote excellence in teaching. Some have done more to consolidate very small school districts. Overall, many states have increased per-pupil investments and investments in teacher salaries much more than has occurred in Iowa.

While Iowa's K-12 educational system itself is not solely responsible for the relative decline in student achievement, much of the solution must come from within the educational system. As noted in the introduction, there have been periodic Gubernatorial initiatives to improve Iowa's educational system, but the state requires a sustained effort to do so. NAEP scores are unlikely to change dramatically over any two-year period, but there must be a commitment made to boosting these and other measures of student achievement in the state. This is not the purview of a single Gubernatorial initiative, but needs to be part of Iowa's overall political culture. It starts

with recognizing where Iowa is, and articulating the unacceptability of maintaining educational mediocrity in the state. Changes will not occur without both recognition of the seriousness of the situation and the commitment to go beyond "business as usual" in addressing it.

**To download the earlier reports, go to
www.iowafiscal.org**

No Longer A Leader (2006)

***Securing Iowa's Economic Future:
Strengthening Skills, Work Supports and
Economic Security for Working Families
(2005)***

No Longer A Leader Addendum: Iowa's Over-25 Population

Securing Iowa's Economic Future analyzed the educational levels of Iowa's working-age (25-64) population. This addendum provides more detailed, comparative information on the 25-and-over population from the 1990 Census, 2000 Census, and the 2008 American Community Survey. Information on only the 25-64 population for all three of these years – the information shown in the Update – is not available. Since Iowa has a larger over-65 population than the country as a whole (and particularly an over-75 population), who are less likely to have bachelor's, graduate, or professional degrees, the figures slightly overstate the differences between Iowa and the United States that exist for just the working-age population. This does not have a significant impact on comparisons over time, however.

Information for the 25-and-over population is shown for Iowa and the United States as a whole (see Table A, next page), and for the white, non-Hispanic population (see Table B, next page). Both tables show a reduction in the share of adults with less than a high-school diploma, with Iowa having a higher percentage of adults with at least a high-school diploma than the country as a whole. In fact, Iowa has made greater gains than the country as a whole in reducing the proportion of high-school dropouts within its total and white, non-Hispanic population during this period. Again, this confirms that "Iowans are educated, to a point."

Although there has been an increase in Iowa adults with bachelor's degrees and graduate or professional degrees over this period, it has consistently lagged behind that of the country as a whole. Further, the gap is much wider when looking only at the white, non-Hispanic population.

In 2008, the percentage of white, non-Hispanic adults in Iowa with at least a bachelor's degree was 24.5 percent of the 25-and-older population, compared with 30.7 percent in the United States as a whole – a 6.2 percent gap. This compares with an advantage in high-school graduates of only 1.5 percent (91.6 percent of all adults in Iowa, compared with 90.1 percent of all adults in the U.S.). The gap is particularly pronounced for graduate or professional degrees, with only 7.2 percent of Iowa adults having graduate or professional degrees, compared with 11.4 percent of adults in the United States.

These gaps have implications for Iowa's future economic growth and development in the 21st century information age, where higher skills increasingly are required for economic advancement and highly compensated employment. *Securing Iowa's Economic Future* emphasized the need for workforce training and professional-development activities that focus upon this population of Iowa adults, because these adults will continue to be the major share of Iowa's workforce in the next two decades.

The information also has implications for the education of Iowa's children, which is the subject of *No Longer A Leader*. Parents have a strong influence on their children's aspirations and educational achievement. While Iowans value education and literacy, this may not extend to a commensurate emphasis upon educational excellence and postsecondary education. As with the NAEP scores, the differences between Iowa and the nation are larger when the white, non-Hispanic population is the subject of review. This group is an important measure of achievement in Iowa because it represents such a high percent of the population as a whole.

Over the long term, if Iowa is to close this educational gap among its adult population, it will require additional attention to the education of its children from birth through 25, and beyond. While the educational levels of Iowa adults do not explain the decline in educational performance among Iowa's students on NAEP scores, they play a role that must be recognized and addressed.

Table A
Age 25 and Over Educational Attainment

1990	Iowa		United States	
Total Age 25 and Over	1,776,798		158,868,436	
Less Than High School	353,800	19.9%	39,343,718	24.8%
High School Diploma	684,368	38.5%	47,642,763	30.0%
Some College	302,600	17.0%	29,779,777	18.7%
Associate Degree	136,638	7.7%	9,791,925	6.2%
Bachelor's Degree	207,269	11.7%	20,832,567	13.1%
Graduate or Professional Degree	92,123	5.2%	11,477,686	7.2%

Source: United States Census Bureau, 1990 Census

2000	Iowa		United States	
Total Age 25 and Over	1,895,856		182,211,639	
Less Than High School	263,436	13.9%	35,715,625	19.6%
High School Diploma	683,942	36.1%	52,168,981	28.6%
Some College	405,748	21.4%	38,351,595	21.0%
Associate Degree	140,640	7.4%	11,512,833	6.3%
Bachelor's Degree	278,350	14.7%	28,317,792	15.5%
Graduate or Professional Degree	123,740	6.5%	16,144,813	8.9%

Source: United States Census Bureau, Census 2000

2008	Iowa		United States	
Total Age 25 and Over	1,979,224		200,030,018	
Less Than High School	192,889	9.7%	30,068,765	15.0%
High School Diploma	668,417	33.8%	57,032,214	28.5%
Some College	446,292	22.5%	42,565,378	21.3%
Associate Degree	191,386	9.7%	15,006,479	7.5%
Bachelor's Degree	335,245	16.9%	35,003,071	17.5%
Graduate or Professional Degree	144,995	7.3%	20,354,111	10.2%

Source: United States Census Bureau, 2008 American Community Survey

Table B
White, Non-Hispanic Age 25 and Over Educational Attainment

1990	Iowa		United States	
Total Age 25 and Over	1,725,131		125,898,648	
Less Than High School	338,184	19.6%	26,361,838	20.9%
High School Diploma	670,690	38.9%	39,521,862	31.4%
Some College	293,736	17.0%	24,285,302	19.3%
Associate Degree	133,627	7.7%	7,985,070	6.3%
Bachelor's Degree	201,897	11.7%	17,902,015	14.2%
Graduate or Professional Degree	86,997	5.0%	9,842,561	7.8%

Source: United States Census Bureau, 1990 Census

2000	Iowa		United States	
Total Age 25 and Over	1,792,980		133,786,263	
Less Than High School	230,515	12.9%	19,459,455	14.5%
High School Diploma	657,711	36.7%	40,148,392	30.0%
Some College	386,764	21.6%	29,233,180	21.9%
Associate Degree	135,425	7.6%	8,884,614	6.6%
Bachelor's Degree	267,618	14.9%	22,977,114	17.2%
Graduate or Professional Degree	114,947	6.4%	13,083,508	9.8%

Source: United States Census Bureau, Census 2000

2008	Iowa		United States	
Total Age 25 and Over	1,836,344		139,289,828	
Less Than High School	153,850	8.4%	13,833,182	9.9%
High School Diploma	630,547	34.3%	40,876,742	29.3%
Some College	420,317	22.9%	30,745,193	22.1%
Associate Degree	182,127	9.9%	11,072,027	7.9%
Bachelor's Degree	318,053	17.3%	26,907,777	19.3%
Graduate or Professional Degree	131,450	7.2%	15,854,907	11.4%

Source: United States Census Bureau, 2008 American Community Survey