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## An Analysis of the Relationship between K-12 Public Education Spending and Student Academic Achievement in Iowa [paper, Bolton award version]

Lydia Berns-Schweingruber  
University of Northern Iowa, bernssl@uni.edu

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**An Analysis of the Relationship between K-12 Public Education Spending and Student  
Academic Achievement in Iowa**

Lydia Berns-Schweingruber

University of Northern Iowa

AN ANALYSIS OF THE RELATIONSHIP BETWEEN K-12 PUBLIC EDUCATION  
SPENDING AND STUDENT ACADEMIC ACHIEVEMENT IN IOWA

Student academic achievement in Iowa is on the decline (U.S. Department of Education 2022). Some politicians propose increasing public education spending in order to address worrisome trends in academic achievement (Richardson 2022). Prior studies disagree about whether there is a relationship between school spending and student outcomes (Betts 1995; Card and Krueger 1996; Card and Payne 2002; Coleman et al. 1966; Downes and Figlio 1997; Greenwald et al. 1996; Hanushek 1986; Jackson et al. 2015; Lafortune et al. 2018; Martorell et al. 2016; Miller 2018; Rajpal 1969). The purpose of this study is to determine if there is a relationship between K-12 public education spending and student academic achievement in Iowa. This project analyzed data from the past nineteen years to examine the relationship between Iowa's per-pupil expenditure and student outcomes — specifically, 4-year graduation rate, K-8 average daily attendance, math proficiency, and English language arts (ELA)/reading proficiency. Results demonstrate that there is no significant relationship between Iowa's per-pupil expenditure and student academic achievement. While per-pupil expenditure in Iowa has increased over the past nineteen years, student outcomes have not improved. Policymakers and future researchers need to consider why Iowa's student academic achievement is on the decline in order to effectively address the issue.

Student academic achievement in Iowa is on the decline. In 2022, only 33% of Iowa 4th graders and 29% of Iowa 8th graders scored proficient in reading on the National Assessment of Educational Progress (NAEP). In mathematics, only 40% of Iowa 4th graders and 28% of Iowa 8th graders scored proficient on the NAEP. Some of these proficiency percentages are the lowest they have been in nearly two decades. For instance, Iowa 8th-graders' reading proficiency on the NAEP has dropped 9% since 2013 and Iowa 8th-graders' mathematics proficiency has fallen 7 % since 2007 (U.S. Department of Education 2022).

While the NAEP and other standardized tests are commonly used to assess students, there is debate about the validity of standardized test scores in measuring student knowledge. Standardized tests are a limited measure of student learning; furthermore, they are culturally biased and serve to marginalize minority groups — specifically, students of color (Cunningham 2018). Regardless of whether standardized test scores are a fair measure of students' academic knowledge and skills, these test scores have both individual and state consequences. At an individual level, a student's test scores affect their chances of getting into college and receiving scholarships. At a state level, student test scores are used to measure student academic performance in Iowa. These test scores are compared with student test scores in other states, and thus create a perception about education in the state of Iowa. Additionally, student test scores are used as a criterion for federal funding and teacher evaluations. Clearly, there are major consequences of students' scores on standardized tests. Thus, the decline in Iowa student test scores is of concern.

How does Iowa address worrisome trends in academic achievement? Some politicians propose increasing public education spending. Deidre DeJear, the 2022 democratic candidate for Iowa governor, proposed a \$300 million increase in funding, in addition to a continuous annual

increase of at least 4% in state per-pupil aid (Richardson 2022). Will proposals to increase spending actually improve academic achievement? To answer this question, it is critical to understand the relationship between school spending and student achievement. This study examines the relationship between Iowa's K-12 public education spending and four variables of student academic achievement in Iowa public schools — 4-year graduation rate, K-8 average daily attendance rate, math proficiency scores, and ELA/reading proficiency scores. The findings of this research can help policymakers and future researchers consider why Iowa's student academic achievement is on the decline so that the issue can be effectively addressed.

## LITERATURE REVIEW

The modern debate on the relationship between school spending and student achievement began with the publication of the Coleman Report in 1966. The Coleman Report was mandated by the Civil Rights Act of 1964 — Congress required the US Office of Education to conduct a report on the inequality of educational opportunity in the United States. Researchers collected data on students' backgrounds, school characteristics, and standardized test scores. They had teachers administer their survey to students in almost 20,000 classrooms across the United States (Coleman et al. 1966). The Coleman Report found no significant correlation between school resources and student achievement — specifically, differences in school resources could only explain 10% of the variance in student achievement outcomes. The findings of the Coleman report propelled efforts to make school spending more efficient since it appeared that school spending was not improving student achievement. The results of the report were used by President Nixon and others to justify government cuts to education spending in the 1970s (Cunningham 2018).

Since the publication of the Coleman report in 1966, many researchers have examined the relationship between school spending and student achievement. Previous studies disagree about the association between school spending and student outcomes. Some studies (Betts 1995; Hanushek 1986; Martorell et al. 2016) claim that there is no significant relationship between school expenditure and student achievement. Other studies (Card and Krueger 1996; Card and Payne 2002; Downes and Figlio 1997; Greenwald et al. 1996; Jackson et al. 2015; Lafortune et al. 2018; Miller 2018; Rajpal 1969) suggest a positive relationship between school expenditure and student outcomes. There is no clear consensus among researchers about the relationship between school spending and student achievement.

The following studies support The Coleman Report's findings and found no significant correlation between school spending and student achievement. Hanushek (1986) analyzed the relationship between per-pupil expenditure and student test scores. He concluded that there is no significant relationship between school expenditure and student performance. Additionally, Betts (1995) analyzed data from the National Longitudinal Survey of Youth to examine the link between school quality and student earnings. He concluded that there is no significant correlation between school quality and student outcomes. Furthermore, Martorell, Stange, and McFarlin Jr. (2016) examined the effects of almost 1,400 school capital campaigns on student achievement. Their research concluded that school capital campaigns do not significantly improve student achievement.

In contrast, other studies suggest a positive relationship between spending and student academic achievement. Specific to the state of Iowa, Rajpal (1967) examined the relationship between educational quality and public secondary school expenditure. He found that higher expenditure per pupil in Iowa secondary public schools was associated with higher education

quality. Furthermore, Greenwald, Hedges, and Laine (1996) used meta-analytic methods to examine how various school resources affected student achievement. Their study concluded that a large range of school resources, including per-pupil expenditure, were positively related to student achievement. Moreover, Downes and Figlio (1997) studied how tax and expenditure limits affected standardized test scores. They found that the tax or expenditure limits on local governments cause a significant decrease in student math scores.

Additionally, Card and Krueger (1996) conducted a longitudinal study of black and white students in North and South Carolina to examine how school resources affected students' earnings and educational attainment. Their research suggested that gaps in students' earnings and educational attainment reflected gaps in school resources. Similarly, Card and Payne (2002) examined the effect of school spending inequality on SAT scores. They found evidence that equalizing school spending narrows test score gaps among family backgrounds — thus, school spending may be positively related to student performance.

Furthermore, Jackson, Johnson, and Persico (2015) studied the effect of school spending on adult outcomes. They found that increasing per-pupil spending by 10% each year for all twelve years of a student's education results in 0.27 more completed years of education. Additionally, Lafortune, Rothstein, and Schanzenbach (2018) studied the effect of post-1990 school finance reforms on student achievement. They selected their sample from the National Assessment of Educational Progress and found that school financial reforms improve student achievement. Finally, Miller (2018) examined the effect of education spending on student outcomes in 24 states by considering property value variation. He concluded that increasing spending by 10% improves graduation rates by 2.1 to 4.4% and student test scores by 0.05 to

0.09 standard deviations. Thus, his study provides evidence that education spending is positively correlated with measures of student academic achievement.

There are differing conclusions among researchers about the relationship between school spending and student academic achievement. Based on previous studies, it seems that context affects whether spending and outcomes are related. Thus, it is critical to analyze the relationship in specific contexts instead of attempting to make a generalized statement about the correlation between spending and achievement. This study attempts to analyze how school spending and student achievement are related in the specific context of Iowa. Additionally, there has not been recent research on how education spending affects academic achievement in Iowa. More research should be conducted to examine the relationship between Iowa's school spending and student academic achievement. Thus, the aim of this study is to analyze nineteen years of recent data — from 2003 to 2021 — to determine whether there is a relationship between Iowa's K-12 public education spending and student academic achievement.

## METHODS

This study analyzed data from 2003 to 2021 to examine the correlation between K-12 public education spending and student academic achievement in Iowa. K-12 public education spending was measured as the annual per-pupil expenditure in Iowa public schools. Per-pupil expenditure is calculated by dividing the state's total expenditure for K-12 public schools by the total number of students enrolled in these schools. Per-pupil expenditure data were taken from the United States Census Bureau's Annual Survey of School System Finances (U.S. Bureau of the Census 2022). The annual per-pupil expenditure was adjusted for inflation and reported in 2023 dollars. Inflation was adjusted based on the US government Consumer Price Index for All Urban Consumers (CPI-U) data from the U.S. Labor Department's Bureau of Labor Statistics



(Coinnews Media Group LLC 2023). The following formula is an example of how 2003 dollars would be converted to 2023 dollars:  $2003 \text{ Dollars Amount} \times (2023 \text{ average CPI-U} / 2003 \text{ average CPI-U}) = 2023 \text{ Dollars Amount}$ . The 2023 average CPI-U that was used at the time of calculation was 299.170. In this study, the per-pupil expenditure adjusted for inflation will be referred to as “adjusted per-pupil expenditure.”

Student academic achievement in Iowa public schools was analyzed using four variables — 4-year graduation rate, K-8 average daily attendance rate, English language arts (ELA)/reading proficiency, and mathematics proficiency. Student academic achievement data for 2003 to 2017 were taken from the Iowa Department of Education’s State Report Cards For No Child Left Behind (Iowa Department of Education 2017). Student academic achievement data for 2018 to 2021 were taken from the Iowa Department of Education's Performance Profiles (Iowa Department of Education 2022). In 2017, the Every Student Succeeds Act replaced No Child Left Behind and altered the form in which Iowa published data — thus, data for academic achievement had to be collected from two sources.

The 4-year graduation rate is reported by the Iowa Department of Education for each graduating class — this rate is the percentage of Iowa public school students who completed high school within 4 years. The K-8 average daily attendance rate is reported by the Iowa Department of Education each year for Iowa public schools — they calculate this rate by dividing students’ total number of days attended in school by students’ total number of days enrolled in school. The State Report Cards (2003 to 2017 data source) report the K-8 average daily attendance rate as the only measure of student attendance. The Performance Profiles (2018 to 2021 data source) report the average daily attendance rate for each individual grade,

kindergarten through 12th. This study calculated the K-8 average daily attendance rate for 2018 to 2021 by averaging the individual attendance rates for kindergarten through 8th grade.

ELA/reading proficiency rates and mathematics proficiency rates are made available by the Iowa Department of Education each year. These proficiency rates are measured as the percentage of students in grades 3 through 11 who score proficient or above on English Language Arts (ELA)/reading state assessments and mathematics state assessments. According to the Iowa Department of Education, “Students performing at the Proficient level demonstrate adequate competency over the knowledge, skills, and abilities that meet the requirements for their grade level associated with academic readiness for college and career in the subject area” (Iowa Department of Education 2022). Thus, student rates of proficiency are based on the results of standardized assessments created by the state.

The Performance Profiles (2018 to 2021 data source) report the average proficiency rate for all students in grades 3 through 11. Thus, this study used this provided proficiency rate for each year. The State Report Cards (2003 to 2017 data source) report the average proficiency rate for each individual grade. In these cases, the study calculated the average proficiency rate by averaging the proficiency rates for grades 3 through 11. Additionally, it is important to note that the Iowa Department of Education's Performance Profiles reported no student test scores in 2020 due to COVID-19. Thus, this analysis does not have ELA/reading or mathematics proficiency data for the year 2020.

The following research question was used for this study: Is there a significant relationship between public education spending and student academic achievement in Iowa? The null hypothesis was that there is no significant relationship between K-12 public education spending and student academic achievement in Iowa. The alternative hypothesis was that there is a

significant relationship between K-12 public education spending and student academic achievement in Iowa. An alpha level of 0.05 was used to determine if the correlations were significant.

IBM SPSS Statistics software was used to analyze the data. First, this study considered univariate analysis. The range, mean, median, and standard deviation were determined for each of the following variables: per-pupil expenditure (adjusted for inflation and reported in 2023 dollars), 4-year graduation rate, K-8 average daily attendance rate, ELA/reading proficiency, and mathematics proficiency (see Table 1). Each variable was graphed over time from 2003 to 2021 (see Appendix). Furthermore, this study used bivariate analysis. Bivariate correlation tests were run to find the Pearson correlation coefficient between the independent variable (per-pupil expenditure) and each of the dependent variables (student outcomes). The assumptions of the Pearson correlation coefficient test were met — all variables were at the ratio level of measurement, data from all variables had a normal distribution, and there were no outliers. The correlation tests were two-tailed and sought to determine if there was a significant correlation between per-pupil expenditure and any of the student outcomes (see Table 2).

## FINDINGS

### *Univariate Analysis*

Univariate analysis was run to examine the trends in adjusted per-pupil expenditure and each variable of student academic achievement (4-year graduation rate, K-8 average daily attendance rate, ELA/reading proficiency, and mathematics proficiency) from 2003 to 2021. The univariate analysis examined the minimum, maximum, range, mean, median, and standard deviation for each of these variables. Compiled results from the univariate analysis are shown in Table 1.

**Table 1. Univariate Analysis of Per-Pupil Expenditure and Student Outcomes**

	Minimum	Maximum	Range	Mean	Median	Standard Deviation
Adjusted Per-Pupil Expenditure (2023 dollars)	12,085.58	14,016.18	1,930.60	13,244.97	13,394.71	666.72
4-Year Graduation Rate	87.3	91.8	4.50	90.19	90.50	1.22
K-8 Average Daily Attendance Rate	93.9	96.2	2.30	95.64	95.80	0.53
ELA/Reading Proficiency	68.95	77.11	8.46	74.66	75.45	2.39
Mathematics Proficiency	65.21	80.53	15.32	76.93	78.10	3.70

Results showed an increase in adjusted per-pupil expenditure (reported in 2023 dollars) from 2003 to 2021 (see Appendix Graph 1). During this time range, adjusted per-pupil expenditure was at its lowest in 2004 at \$12,085.58 and highest in 2021 at \$14,016.18. From 2004 to 2021, there was a 15.97% increase in adjusted per-pupil expenditure.

Additionally, results found that Iowa's 4-year graduation rate and K-8 average daily attendance rate have remained fairly constant (see Appendix Graph 2 and Graph 3). From 2003 to 2021, there was a 4.5% range for Iowa's 4-year graduation rate — 87.3% at its lowest in 2009 to 91.8% at its highest in 2020. There was a 2.3% range for Iowa's K-8 average daily attendance rate from 2003 to 2021 — 93.9% at its lowest in 2021 to 96.2% at its highest in 2014.

Finally, results demonstrate that there is significant variability in Iowa's ELA/reading and mathematics proficiency rates (see Appendix Graph 4 and Graph 5). From 2003 to 2021, there was an 8.16% range for Iowa's ELA/reading proficiency rate — 77.11% at its highest in 2011 to 68.95% at its lowest in 2021. There was a 15.32% range for Iowa's mathematics proficiency rate from 2003 to 2021 — 80.53% at its highest in 2015 to 65.21% at its lowest in 2021. There was a notable drop in proficiency rates from 2018 to 2019. ELA/reading proficiency dropped from 77.04% in 2018 to 69.81% in 2019. Mathematics proficiency dropped from 78.26% in 2018 to

70.16% in 2019. These drops in test scores may be partially due to Iowa's switch from Iowa Assessments to the Iowa Statewide Assessment of Student Progress (ISASP), which will be explained further in the discussion section of this paper.

### *Bivariate Analysis*

Bivariate analysis was run to examine the relationship between adjusted per-pupil expenditure and each variable of student academic achievement (4-year graduation rate, K-8 average daily attendance rate, ELA/reading proficiency, and mathematics proficiency) from 2003 to 2021. The bivariate analysis determined the Pearson correlation between adjusted per-pupil expenditure and each student outcome, as well as whether the correlation was statistically significant using an alpha level of 0.05. Compiled results from the bivariate analysis are shown in Table 2.

**Table 2. Bivariate Analysis of Per-Pupil Expenditure and Student Outcomes**

	Pearson Correlation	Significance (2-tailed)	Significant Correlation? (Is $P \leq 0.05$ ?)
Per-Pupil Expenditure & Graduation Rate	0.204	0.402	No
Per-Pupil Expenditure & Attendance Rate	-0.362	0.128	No
Per-Pupil Expenditure & ELA/Reading Proficiency	-0.039	0.877	No
Per-Pupil Expenditure & Mathematics Proficiency	-0.153	0.545	No

Bivariate analysis shows no significant correlation between per-pupil expenditure and any variable of student academic achievement. Therefore, the null hypothesis is accepted. The results of the bivariate analysis align with the results from the univariate analysis. Iowa's adjusted per-pupil expenditure has increased from 2003 to 2021, but no variables of student academic achievement have improved. Therefore, it follows that the bivariate analysis showed

no significant correlation between per-pupil expenditure and any variable of student academic achievement.

## DISCUSSION AND CONCLUSIONS

The results of this study show that there is no significant relationship between Iowa's K-12 public education spending and student academic achievement. Iowa school spending has increased from 2003 to 2021. However, variables of student academic achievement have not improved during this time range — Iowa's 4-year graduation rate and K-8 average daily attendance rate have remained fairly constant and student proficiency rates in ELA/reading and mathematics have varied with a significant decrease in 2019. Thus, the increase in Iowa's per-pupil expenditure is not correlated with a significant change in student academic achievement. If the per-pupil expenditure in Iowa is increasing, why is student academic achievement not improving? There are five potential explanations.

First, the cost of effectively educating students may be increasing. More and more schools are incorporating technology into the classroom and buying students personal laptops, which may contribute to an increased cost of educating students. Effectively educating students today may be more costly than it was at the beginning of the 21st century.

Second, education funding may not be distributed effectively. Per-pupil expenditure is divided among categories such as teacher salaries, teacher benefits, pupil support, teacher support, and school administration (U.S. Bureau of the Census 2022). Student academic achievement may be affected by how education spending is utilized. For example, students may not benefit if a large portion of school funding goes to administration salaries instead of classroom resources. Furthermore, the unequal distribution of local taxes contributes to inequality in education. Since schools are funded by property taxes, schools in wealthier

neighborhoods may receive more funding than schools in poorer areas. Thus, taxpayers' dollars may be going to schools that already have enough money while struggling schools are not receiving necessary funding.

Third, the quality of teachers affects student academic achievement. This study considers school spending but not the quality of instruction. If teachers are entering the classroom with poor training in education, then student academic achievement may be negatively affected. Specific to the state of Iowa, standards to become a teacher are easing. For example, the Iowa Legislature passed a bill in 2022 that eliminated the requirement for Iowa teachers to take an exam before receiving their teaching license (The Iowa Legislature 2022). If standards for the quality of teachers are loosening, then student academic achievement may be negatively affected.

Fourth, student academic achievement must be considered in the context of the COVID-19 pandemic. The effects of COVID-19 are not of significant concern to this current study — only data in 2020 and 2021 occur after the start of COVID-19. However, future research analyzing academic achievement must take the effects of COVID-19 into account. Specifically, the closing of schools in 2020 affected students' learning experiences. Students had to engage in virtual learning and were separated from their teachers. In this study, student proficiency rates in mathematics dropped from 70.16% in 2019 to 65.21% in 2021 (see Appendix Graph 5) — this may be partially due to the effects of COVID-19. It is important to consider that measures of student academic achievement may have been negatively impacted by the COVID-19 pandemic.

Fifth, future researchers should consider that per-pupil expenditure may no longer be an effective means of measuring public education spending in Iowa because of the new tuition voucher program. This issue does not explain the results of this study because all data in this

study were collected before the start of the tuition voucher program. In 2023, the Iowa Legislature approved a tuition voucher bill that allows students to allocate their per-pupil expenditure toward private schools (The Iowa Legislature 2023). Private school tuition voucher programs decrease funding for public schools, but this is not represented when per-pupil expenditure is used as the measure of school spending. Tuition voucher programs allow students to take the per-pupil expenditure provided by the state and apply it toward a private school. When public school spending decreases as a result of tuition voucher programs, the reported per-pupil expenditure is not affected because the student is also leaving the public school system. Thus, the measure of per-pupil expenditure does not account for public school funding being drained as a result of tuition voucher programs. If Iowa appears to be increasing per-pupil expenditure in the future, it does not necessarily mean that the total funding for public schools is actually increasing.

### *Limitations*

It is important to consider the limitations of this study. First, this study does not consider how per-pupil expenditure is used. Student academic achievement may be affected by how per-pupil expenditure is divided among categories such as teacher salaries, student support, and administration salaries. Additionally, the study does not consider how per-pupil expenditure is dispersed among school systems. Student academic achievement may be affected by a disproportionate distribution of expenditure, especially if funds are going toward wealthy school districts instead of districts in need of financial support. Another limitation of this study is that per-pupil expenditure is just one variable affecting student academic achievement. While this study chose school spending as the independent variable, there are many other factors — such as teacher training, a student’s home environment, and a student’s relations with peers — that may



affect student outcomes. Additionally, this study does not analyze data along lines of race, gender, or socioeconomic status. The study could be advanced by considering how Iowa's student demographics affect student academic achievement.

Finally, the mathematics and ELA/reading proficiency rates for 2019 and 2021 may be slightly inconsistent data points. As discussed before, ELA/reading proficiency dropped from 77.04% in 2018 to 69.81% in 2019 and mathematics proficiency dropped from 78.26% in 2018 to 70.16% in 2019. The Iowa Department of Education reports these proficiency rates and fails to explain the sudden drop in test scores. Upon further examination, the drop in proficiency rates may be due to Iowa's switch from using the Iowa Assessments in 2018 to using the Iowa Statewide Assessment of Student Performance (ISASP) in 2019. Thus, the proficiency rates in 2019 and 2021 are measured with the ISASP instead of the Iowa Assessments. Findings may be affected by Iowa's inconsistent means of assessing student proficiency. Though the Iowa Department of Education reports student proficiencies as standardized measures that appear consistent over the years, it is important to note that the way of measuring student knowledge was adjusted in 2019.

Future research can address the limitations of this study and extend the analysis of the relationship between Iowa's public education spending and student academic achievement. Future research should analyze how per-pupil expenditure is dispersed. How is school spending divided among teacher salaries and benefits, student support, and administration? Does the division of per-pupil expenditure affect student outcomes? The distribution of per-pupil expenditure for every state is tracked and reported by the U.S. Census Bureau (U.S. Bureau of the Census 2022). Therefore, future research could examine a potential relationship between student outcomes and how per-pupil expenditure is distributed

Additionally, future studies should examine how other independent variables are affecting student academic achievement in Iowa. For instance, how does the quality of teacher training affect student outcomes? Finally, subsequent research should analyze student academic achievement along lines of race, gender, and socioeconomic class. This will provide insight into the effect of student demographics on academic achievement. Additionally, examining data along lines of race, gender, and class may help to identify social inequalities in Iowa's education system.

### *Implications*

Future researchers and policymakers need to consider how to improve student academic achievement in the state of Iowa. As discussed in the introduction of this paper, student test scores are declining in the state of Iowa. Even though the results of this study demonstrate that Iowa's increase in per-pupil expenditure is not correlated with improvements in student academic achievement, policymakers should not assume that funding public schools is ineffective or unimportant. It is possible that the increase in per-pupil expenditure from 2003 to 2021 has not been sufficient in supporting student academic achievement — the state may need to increase school spending to see a positive effect on student outcomes. Additionally, policymakers need to consider how school spending is being dispersed. For example, it is possible that the increase in per-pupil expenditure is going to support administrative positions instead of students. Furthermore, increases in school spending could be going to wealthy school districts where students are already demonstrating high levels of academic achievement instead of poorer school districts where students need support. Policymakers must consider how to effectively disperse public education funds to maximize student achievement.

Finally, the Iowa Department of Education should revise how student proficiency rates are reported in the online Iowa School Performance Profiles. Specifically, there should be an obvious notation in the 2019 report that Iowa switched to using the ISASP to assess student performance. The current online report makes it seem as if proficiency rates are measured in the same way each year. The Iowa Department of Education needs to make it clear that Iowa's student proficiency rates may be inconsistent measures of student performance because of the switch to ISASP in 2019.

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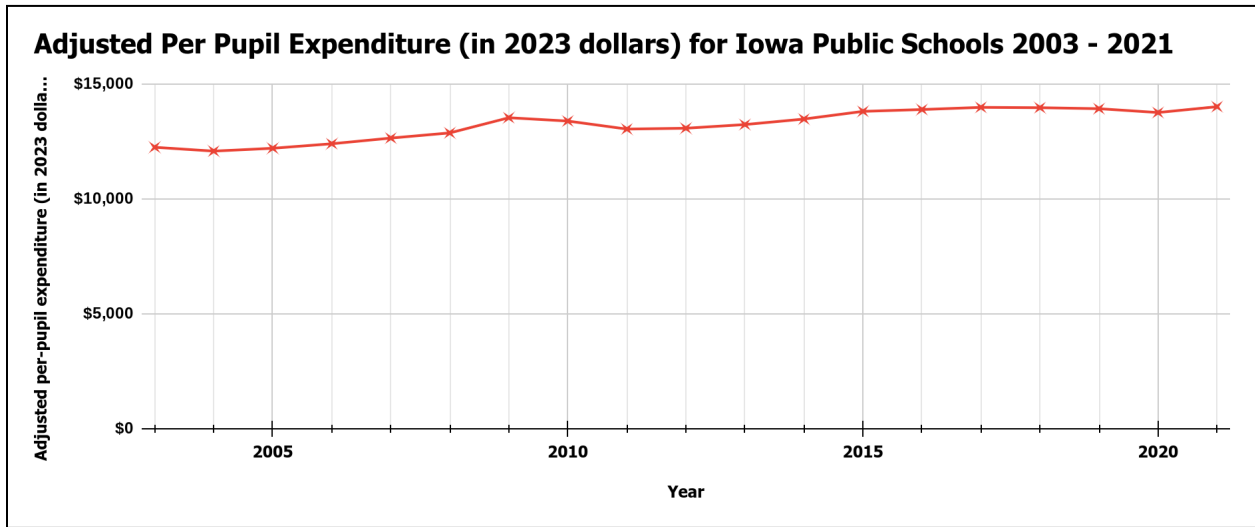
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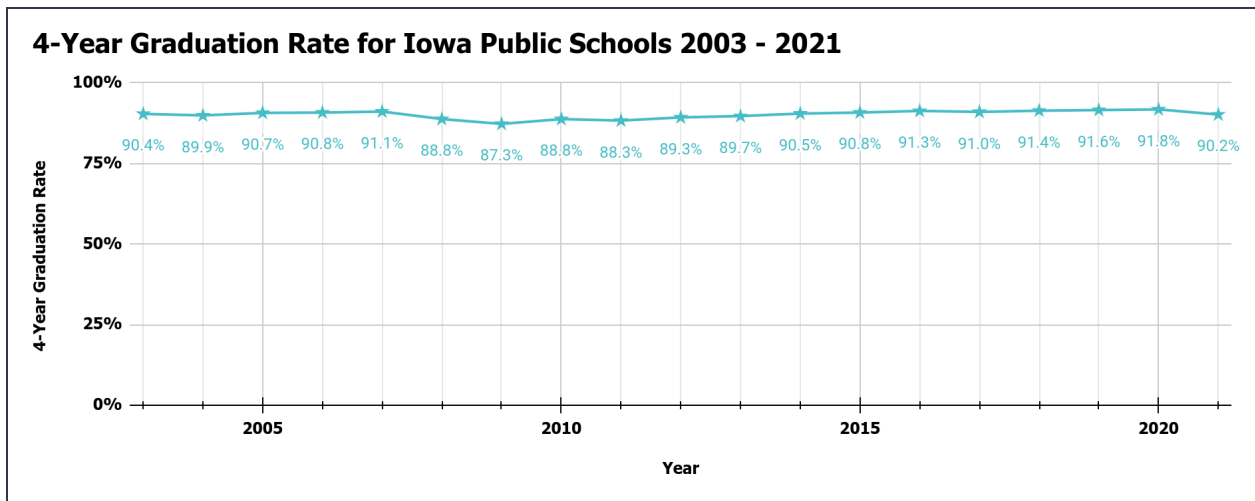
<https://www.nationsreportcard.gov/profiles/stateprofile/overview/IA>

APPENDIX: GRAPHS OF SCHOOL SPENDING AND STUDENT OUTCOMES

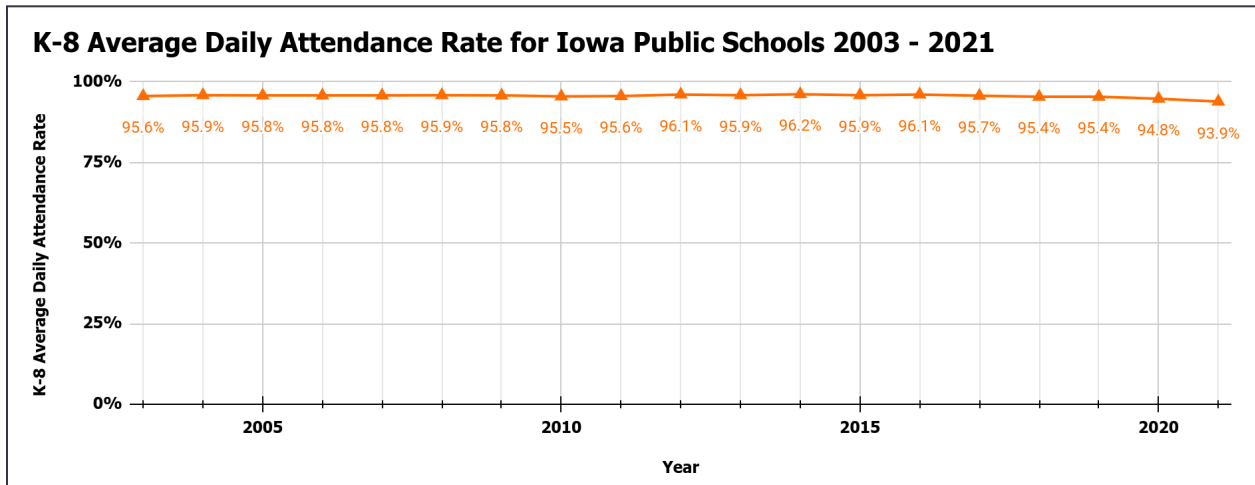
**Graph 1. Iowa’s Adjusted Per-Pupil Expenditure 2003 - 2021**



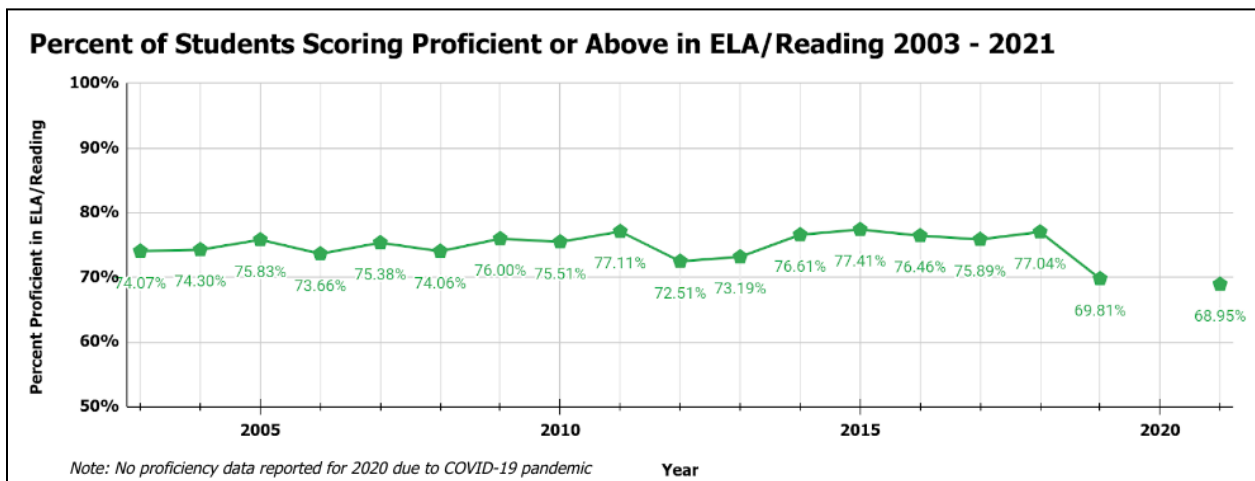
**Graph 2. Iowa’s Graduation Rate 2003 - 2021**



**Graph 3. Iowa’s K-8 Daily Attendance Rate 2003 - 2021**



**Graph 4. Iowa’s Student Proficiency in ELA/Reading**



**Graph 5. Iowa’s Student Proficiency in Mathematics**

