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The Usage and Impact of Act 1240 Teacher Licensure Waivers in Arkansas

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Contents

Executive Summary

Act 1240 of 2015 allows Arkansas school districts to petition for waivers allowing for the employment of teachers who are not licensed under the standard procedures of the state. Since the program's inception in the 2016-17 school year, the number of teachers employed under Act 1240 waivers has increased, with the Arkansas Department of Education reporting 836 teachers hired using Act 1240 waivers in 69 districts during the 2021-22 school year. This represents approximately one quarter of the districts within the state, but only approximately 2 percent of the nearly 40,000 teachers employed last year.

Using publicly available data from the Arkansas Department of Education, we found that Act 1240 waivers are used by districts across Arkansas, but are most prevalent in high-poverty districts in the southeast region of the state. After statistically controlling for school poverty and size, students in schools that hire Act 1240 teachers are less likely to meet grade-level expectations on the state assessments in literacy and mathematics compared to students in schools that do not. Differences in average student academic growth scores between schools with and without Act 1240 teachers, however, are insignificant. This suggests that **the schools that utilize Act 1240 waivers may have underlying differences that contribute to lower student achievement than evidenced by similar schools, but that the introduction of teachers working under Act 1240 waivers does not, on average, significantly impact the academic growth of students within waiver schools.**

We found, however, that the districts with low usage of Act 1240 teacher licensure exceptions demonstrated growth and achievement trends consistent with districts that did not employ any waiver teachers. In contrast, districts where more than 25 percent of teachers were employed under an Act 1240 waiver in 2021-22 had lower levels of student achievement and growth in 2015-16 - the year before the waiver program began. Moreover, these districts experienced greater declines in students' achievement and growth than districts with no waiver use. This suggests that **heavy Act 1240 waiver usage is driven by pre-existing structural changes facing specific, struggling districts, and should be considered as a signal of a need for greater all-around support for these districts.**

1. To what extent and where are Act 1240 waivers being used?

1a. Act 1240 waiver usage is increasing. In 2022, over 800 Arkansas teachers were employed under an Act 1240 waiver in 69 Arkansas districts

The number of districts and teachers receiving Act 1240 waivers by year, from 2016-17 to 2021-22, is presented below in Table 1. Waiver use has increased every year. Since 2016-17, the number of districts using waivers has more than doubled, and the total number of Act 1240 teachers has increased over sevenfold.

During the 2021-22 school year, 69 districts employed 836 teachers using Act 1240 waivers. This represents approximately one quarter of the 261 total districts within the state, and approximately 2 percent of the nearly 40,000 totals teachers employed that year. These totals do not include charter districts or teachers in district conversion charter schools, which are already exempt from the standard state licensure requirements.

For districts that employ at least one Act 1240 teacher, the average percentage of teachers within that district which are hired using an Act 1240 waiver is shown in the third column of Table 1. Since the 2018-19 school year, Act 1240 teachers have steadily accounted approximately 9 percent of the total teachers in their districts, even as the number of Act 1240 teachers has grown more rapidly than the total number of districts hiring Act 1240 waivers. This indicates that the districts hiring Act 1240 teachers most recently are larger districts that hire Act 1240 teachers at a rate similar to smaller districts but have more teachers.

Table 1: Counts of Act 1240 Districts and Teachers by Year, 2017-2022

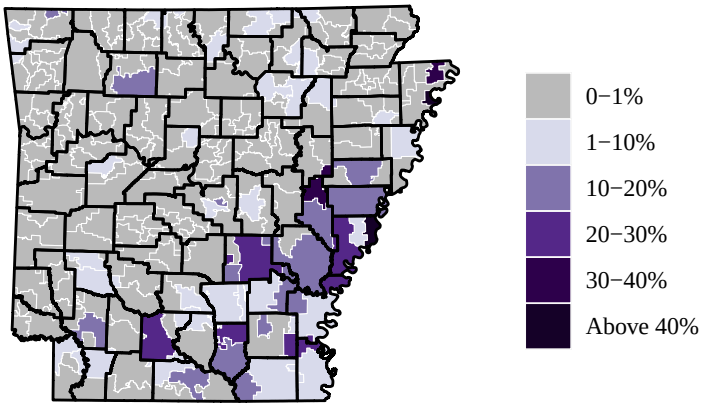
Year	N. Districts with Any Act 1240 Waiver	N. Teachers with Act 1240 Wavier	Avg. Percent of Teachers with Act 1240 Waivers in Districts with Any Waivers
2016-17	29	117	4
2017-18	54	482	7
2018-19	58	660	9
2019-20	64	670	9
2020-21	69	734	8
2021-22	69	836	9

Note: The numbers in the first two columns of this table represent the number of districts with at least one Act 1240 teacher by year and the total number of Act 1240 teachers by year. The third column shows, for only those districts counted in the first column, the average percentages of total teachers which are teaching under a waiver.

1b. Act 1240 teachers are most prevalent in school districts in southeast Arkansas

The map of Arkansas's school districts presented in Figure 1 below is color coded by the percentage of teachers hired under Act 1240 waivers. From this map it is clear that Act 1240 waiver usage is concentrated in southeast Arkansas. The district with the highest percentage of teachers working under an Act 1240 waiver during the 2021-22 school year was the Helena/West Helena School District, where approximately 53 percent of the teachers in the district were hired using an Act 1240 waiver.

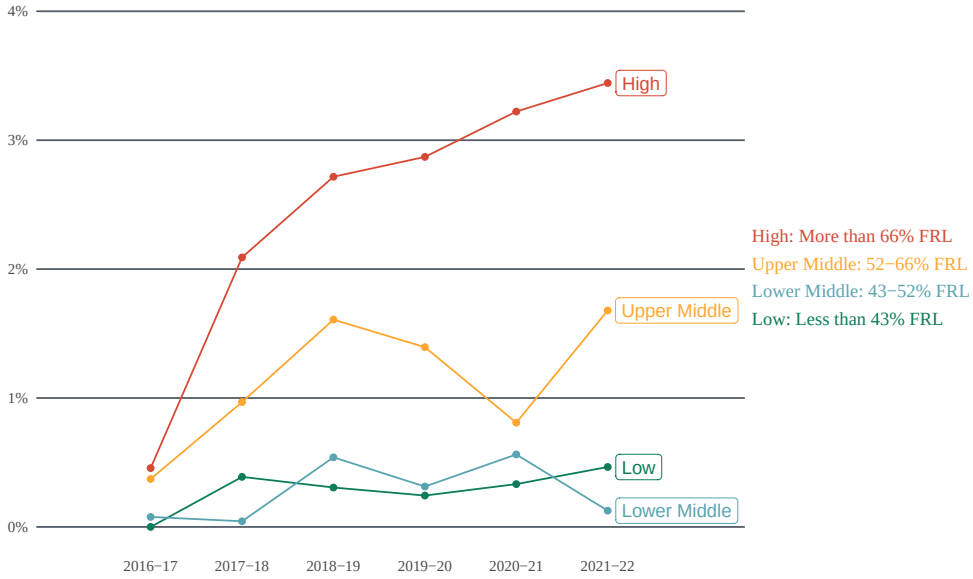
Figure 1: Percent of Teachers Working Under an Act 1240 Waiver by District, 2022



1c. Act 1240 waivers are more prevelant in high-poverty school districts

The lines in Figure 2 represent the percentages of teachers hired using Act 1240 waivers in each year by districts falling into four levels of poverty: high (more than 66 percent of students eligible for free- and reduced-price lunch); upper middle (52 to 66 percent FRL eligible); lower middle (43 to 51 percent FRL eligible); and low (less than 43 percent of students FRL eligible). In high-poverty districts, the percentage of teachers hired using Act 1240 waivers has increased every year since the program's inception, and in the 2021-22 school year Act 1240 teachers account for nearly 4 percent of total teachers in Arkansas's high-poverty districts. The increase in waiver usage for the upper middle poverty districts has been more moderate, including some years of declining usage, but Act 1240 teachers still made up almost 2 percent of total teachers in these districts. Waiver usage is rare in low and lower middle poverty districts, where less than 1 percent of teachers are hired under an Act 1240 waiver.

Figure 2: Percent of Teachers Operating Under an Act 1240 Waiver by District Poverty Level: 2017-2022



2. How do students in schools that hire Act 1240 teachers achieve academically compared to other students?

To explore the relationship between the use of Act 1240 waivers and student achievement, we examine school-level, rather than district-level, usage of Act 1240 teachers. While following districts over time provides insight into the contexts where Act 1240 waivers are used, the impact of individual Act 1240 teachers on student achievement is unlikely to extend beyond the school in which they teach.

The average percent of students meeting or exceeding grade-level math and literacy expectations in schools with and without Act 1240 waiver teachers is presented in Table 2 below. Schools that hire at least one Act 1240 teacher have, on average, lower levels of achievement in both subjects than those that do not.

Table 2: Achievement - School-Level Average Percent Meeting/Exceeding Standards By Year, Subject, and Waiver Status, 2017-2022

Year	Math		Literacy	
	No Act 1240 Exceptions	Any Act 1240 Exceptions	No Act 1240 Exceptions	Any Act 1240 Exceptions
2016-17	48	35	52	43
2017-18	48	33	44	33
2018-19	48	33	45	33
2020-21	37	24	36	27
2021-22	41	25	40	28

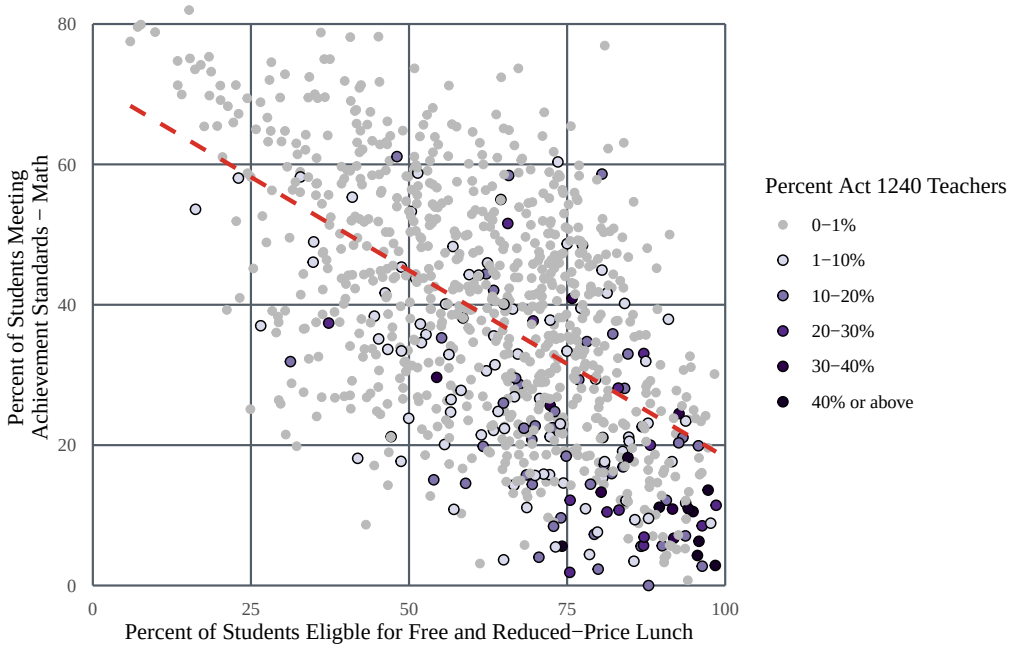
Note: The numbers in this table represent the simple school-level average percent of students meeting standards for math and literacy achievement in schools receiving and not receiving Act 1240 teacher licensure waivers. Data from the 2019-20 school year is missing due to COVID-19. By year, the number of schools using waivers are: 56, 135, 142, 155, and 176.

Determining the true relationship between Act 1240 waivers and student achievement is complicated because achievement scores are highly correlated with school poverty levels. Since schools that hire teachers using Act 1240 waivers enroll, on average, higher levels of economically disadvantaged students than schools who do not, we would expect a comparison of the same groups of schools to show lower levels of achievement even if the waivers did not exist.

To illustrate this point, the school-level scatter plot of math achievement against poverty is presented in Figure 3 below. The dashed red line represents the expected relationship between math achievement and poverty. In other words, the red line estimates the average level of math achievement for a school that enrolls a specific percentage of FRL-eligible students. As predicted, there is a negative correlation between the percentage of FRL-eligible students in a school and the expected achievement level of that school. A similar relationship holds for literacy achievement, and is shown in the appendix in Figure 5.

The coloring of the points in Figure 3 represents the percentage of teachers in that school that were hired under an Act 1240 waiver during the 2021-22 school year, with more heavily shaded dots representing schools with a higher percentage of Act 1240 teachers. Focusing on the horizontal axis, the increased density of heavily shaded dots on the right side of the figure demonstrates that schools with a higher percentage of FRL-eligible students are more likely to hire teachers using an Act 1240 waiver. Looking at the vertical axis, the presence of shaded dots both above and below the red line shows that schools hiring Act 1240 waivers both over- and under-perform schools of similar poverty levels in terms of student math achievement. For schools with greater than 50 percent of students FRL eligible, however, more of the heavily shaded dots fall below the line than above, indicating that, generally, **high-poverty schools hiring teachers under Act 1240 waivers demonstrate lower levels of achievement than similarly high-poverty schools that do not use Act 1240 waivers.**

Figure 3: Relationship Between School Math Achievement Levels and Poverty, 2022



To examine the relationship between Act 1240 waivers, school poverty, and student achievement more formally, we conduct regressions of Act 1240 waiver usage on school-level math and literacy achievement. For these analyses, we compare achievement for waiver and non-waiver schools under all years of the Act 1240 program simultaneously. The first model (presented in column 1 for math and column 3 for literacy of Table 3 below) estimates the average correlation between the usage of Act 1240 waivers and school-level achievement while controlling for only state-level year-to-year differences in student performance. As was suggested in Table 2, schools that hired at least one teacher using an Act 1240 waiver had levels of student math achievement that were, on average, 15 percentage points lower than in schools with no Act 1240 teachers. In literacy, this gap was approximately 11 percentage points.

The second model (presented in column 2 for math and column 4 for literacy) adds statistical controls for school-level poverty, enrollment, and county to the regression of Act 1240 waiver use on student achievement. While the first set of regressions examined average achievement difference between all waiver and non-waiver schools, this second model examines average achievement differences between waiver and non-waiver schools with similar poverty rates, enrollment sizes, and geographic locations. As suggested by the increased density of shaded dots below the red line in Figure 3, these regressions show that schools that hired at least one Act 1240 waiver teacher had levels of student achievement in math approximately 8 percentage points lower than schools with similar levels of FRL-eligible students without Act 1240 waiver teachers. In literacy, the second model reduces the achievement gap between waiver and non-waiver schools to approximately 3 percentage points. In both cases, we see that total school enrollment had no significant impact on student achievement after controlling for poverty rate and county. Compared to the first model, the estimates from the second model indicate a smaller relationship between waiver usage and school-level achievement. This suggests that part of the negative relationship seen with the initial model was due to the high correlation between achievement and poverty rate. The estimates from the second model, however, are still negative and statistically significant. This implies that even among high-poverty schools, the schools which use Act 1240 waivers have significantly reduced levels of achievement.

While these models provide initial estimates of the relationship between Act 1240 waiver usage and student achievement, they only consider two groups of schools - those with and without waivers - without considering the percentage of teachers in a given school that are hired under an Act 1240 waiver. Referring back to Figure 2, we can see that while schools in both high- and low-poverty districts hire Act 1240 teachers, these teachers make up a much larger proportion of the workforce in high-poverty districts than in low-poverty

Table 3: Relationship Between School-level Achievement and the Use of Act 1240 Waivers, 2017-2022

	Math Achievement		Literacy Achievement	
	(1)	(2)	(3)	(4)
Any 1240 Waiver	−0.146***	−0.075***	−0.106***	−0.026**
	(0.020)	(0.013)	(0.019)	(0.012)
Percent Students FRL		−0.360***		−0.518***
		(0.059)		(0.037)
log(Total Enrollment)		−0.002		−0.0003
		(0.015)		(0.009)
Constant	0.484***	0.757***	0.518***	0.829***
	(0.014)	(0.117)	(0.015)	(0.063)
Year FE	Yes	Yes	Yes	Yes
County FE	No	Yes	No	Yes
Observations	4,699	4,699	4,700	4,700
R^2	0.143	0.412	0.189	0.689
Note:				*p<0.1; **p<0.05; ***p<0.01
				Standard errors clustered at the county level

districts. Furthermore, from Figure 3, we can see that relationship between waiver usage and achievement estimated by the regression models is likely driven by the highest poverty schools with the highest density of Act 1240 teachers - the large cluster of very dark dots in the bottom right corner that falls almost completely below the red dotted line. This suggests that the observed negative relationship between waivers and student achievement may be driven by a select number of high-poverty schools which have underlying conditions that negatively impact both student achievement and teacher recruitment.

To explore this, we compare three groups of school districts in Table 4: those with no Act 1240 teachers during the 2021-22 school year, those with between 1 and 25 percent of their teachers working under an Act 1240 waiver during the 2021-22 school year, and those with more than 25 percent of their teachers working under an Act 1240 waiver during the 2021-22 school year. For each of these three groups, we examine the average percent of students meeting or exceeding grade-level achievement expectations in math in the school year before Act 1240 waivers were created (2015-16) and in the most recent school year (2021-22). This comparison allows us to isolate pre-existing differences in achievement between waiver and non-waiver districts, and to examine how achievement levels have changed over time in districts with different intensities of Act 1240 waiver usage. We carry out this comparison at the district level because systemic factors affecting both student achievement and teacher recruitment in the high-waiver-density schools discussed above are likely to be widespread and generate differences in achievement throughout the district.

The third column of Table 4 compares average math achievement for the three groups in 2015-16. **School districts that hire teachers using Act 1240 waivers had lower levels of achievement even before the creation of Act 1240 waivers.** It seems likely that the regional or administrative challenges which today might drive district leaders to hire Act 1240 teachers could be contributing to lower levels of achievement both before and after the introduction of the Act 1240 waiver program.

Among the three groups, the largest gap in student achievement is between the non-waiver districts and the seven high-waiver-density districts, where above 25 percent of teachers were hired under Act 1240 waivers. In 2015-16, prior to the introduction of the waiver program, these districts already had math achievement levels 18 percentage points lower than the districts which had no waiver teachers in 2021-22. This is in contrast to the low-waiver-density districts, which lagged the no-waiver districts by only 5 percentage points in 2015-16.

Looking to the 2021-22 school year, we see that while the achievement gap between the low-waiver-density districts and the no-waiver districts has remained relatively constant over the past six years (growing by less

than a percentage point), the gap between the high-waiver-density districts and the no-waiver districts widened to an over 25 percentage point average difference in the percent of students meeting or exceeding expectations in math achievement. This is driven by declining math achievement levels in the high-waiver-density district, where the percent of students meeting or exceeding grade level expectations in math fell from 25 to 13 percent. This drop far outpaces the approximately 6 percentage point decline in student achievement rates observed in both the low-waiver-density and no-waiver districts. This suggests that there may be underlying conditions within these districts which contributed to lower levels of initial achievement in 2015-16 and greater declines in achievement over the past six years.

Table 4: Average District Math Achievement Before and After the Introduction of Act 1240 Waivers, by District Waiver Density

2021-22 Waiver Density	N. Districts	Pct. Meeting/Exceeding Math, 2015-16	Pct. Meeting/Exceeding Math, 2021-22	Change
None (0% usage)	165	44.2	38.0	-6.2
Low (1-25% usage)	61	39.4	32.6	-6.8
High (>25% usage)	7	25.7	12.9	-12.8

Note: This table examines achievement levels over time for three groups of districts: high-waiver-density districts (above 25 percent of teachers employed under an Act 1240 waiver), low-waiver-density districts (1 to 25 percent of teachers employed under an Act 1240 waiver), and no-waiver districts (no teachers employed under an Act 1240 waiver). The simple average percent of students meeting or exceeding math achievement expectations in 2015-16 and 2021-22, as well as the change over time, are shown for each of the three groups. The high-waiver-density districts are Helena/West Helena, Osceola, Blytheville, Brinkley, Marvell-Elaine, Camden, and Warren.

3. How do students in schools that hire Act 1240 teachers grow academically compared to other students?

While measures of student achievement evaluate what students "know" relative to standardized grade-level expectations, measures of student growth capture how much students "learn" relative to other students with similar performance. The average math and literacy growth scores for schools with and without Act 1240 waiver teachers are compared below in Table 5. Schools with waiver teachers have, on average, slightly lower growth scores than schools that do not have waiver teachers. On average, schools which hired at least one teacher under an Act 1240 waiver had average growth scores approximately two points lower than schools with no waiver teachers in 2020-21 (the most recent year with growth data available). This gap seems to be relatively consistent over time, fluctuating between a one to two percentage point gap in growth scores in the years since the waiver program's inception.

Table 5: Growth - School-Level Average Scores by Subject and Waiver Status, 2017-2021

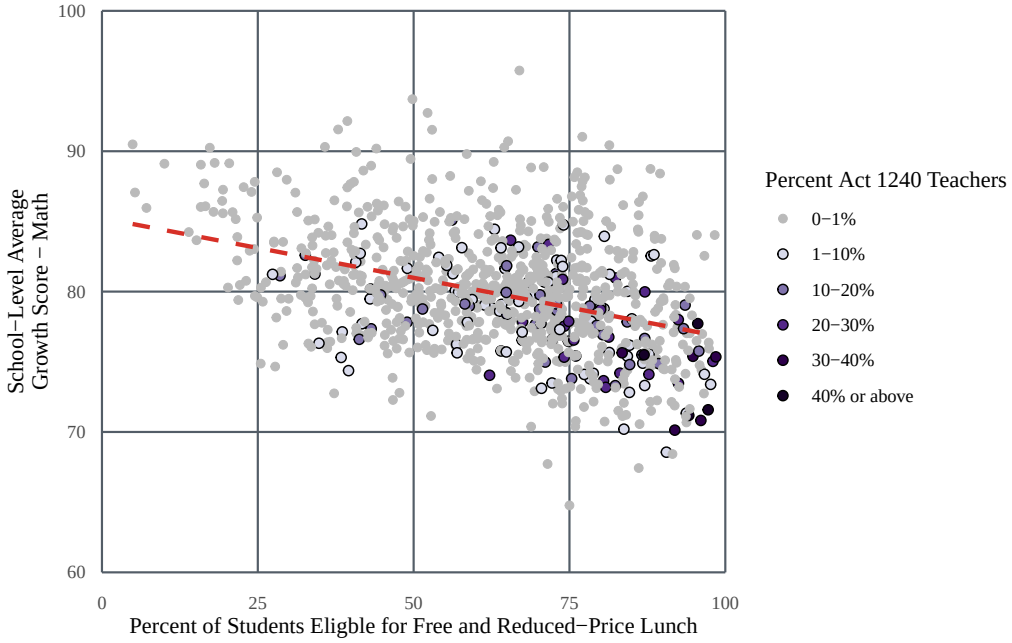
Year	Math		Literacy	
	No Act 1240 Exceptions	Any Act 1240 Exceptions	No Act 1240 Exceptions	Any Act 1240 Exceptions
2016-17	80	78	80	79
2017-18	80	78	80	79
2018-19	80	79	80	79
2020-21	80	78	80	78

Note: The numbers in this table represent the school-level simple average math and literacy growth scores of students in schools receiving and not receiving Act 1240 teacher licenesure waivers. Data from the 2019-20 school year is missing due to COVID-19, and data from the 2021-22 school year is not yet available. By year, the number of schools with waivers are: 56, 135, 142, 155.

A scatter plot of 2020-21 school-level growth scores in math against the percentage of students eligible for free and reduced-price lunch is presented below in Figure 4. The red dotted line shows the expected relationship between average student growth in math and the percent of students who are FRL eligible. The fact that the red line is flatter in this graph indicates a weaker relationship between poverty and growth than existed between poverty and achievement.

The points on the graph are colored in accordance with the percentage of teachers in that school who were hired under an Act 1240 waiver in 2020-21. The majority of these points are clustered on the right side of the graph, again indicating that high-poverty schools are most likely to utilize Act 1240 waivers. Across the FRL-eligibility range, there are shaded dots which fall both above and below the dotted red line, indicating again that there are schools hiring teachers using Act 1240 waivers which both under- and over-perform the expected level of average student math growth for schools with a similar percentage of FRL-eligible students. Looking only at the schools with above 50 percent of students eligible for FRL, however, there is a greater density of shaded dots below the line, suggesting that among high-poverty schools, schools that hire teachers using Act 1240 waivers may average lower math growth scores than peer schools. A similar trend holds when examining growth in literacy, and is shown in the appendix in Figure 6.

Figure 4: Relationship Between School Math Growth Scores and Poverty, 2021



To explore the relationship of Act 1240 waivers to student poverty and academic growth more formally, we conduct regressions of Act 1240 waiver usage. The first model (presented in column 1 for math and column 3 for literacy of Table 6 below) estimates the average correlation between the usage of Act 1240 waivers and school-level growth while controlling for only state-level year-to-year differences in student growth scores. Schools that hired at least one teacher using an Act 1240 waiver had math growth scores that were on average 1.3 points lower than schools that hired no waiver teachers; in literacy, the gap was 1.7 points.

Table 6: Relationship Between School-level Average Growth Scores and the Use of Act 1240 Waivers, 2017-2021

	Math Growth		Literacy Growth	
	(1)	(2)	(3)	(4)
Any 1240 Waiver	−1.389***	−0.329	−1.668***	−0.436*
	(0.311)	(0.241)	(0.366)	(0.254)
Percent Students FRL		−2.396**		−4.152***
		(1.090)		(1.272)
log(Total Enrollment)		−0.076		0.594***
		(0.205)		(0.192)
Constant	80.060***	81.625***	79.781***	79.077***
	(0.227)	(1.716)	(0.227)	(1.793)
Year FE	Yes	Yes	Yes	Yes
County FE	No	Yes	No	Yes
Observations	3,771	3,771	3,771	3,771
R^2	0.023	0.180	0.021	0.224
Note:				*p<0.1; **p<0.05; ***p<0.01
				Standard errors clustered at the county level

The second model (presented in column 2 for math and column 4 for literacy) adds controls for school-level poverty, enrollment, and geographic location to the regression of Act 1240 waiver use on growth. After

accounting for the impact of these factors on student growth, we estimate no significant differences in student math growth scores between schools that hire Act 1240 teachers and similar schools that do not. For literacy, we see that schools that hire Act 1240 teachers have average growth scores that are 0.4 points less than similar schools that do not, but this difference is only slightly statistically significant and represents a small percentage change in students' growth scores.

These regressions show that, looking across all years, **schools with waivers have growth scores that are consistent with those of peer schools that are similar in terms of size, poverty, and location.** Unlike Figure 4, however, these regressions do not account for differing densities of waiver usage in schools, and only groups schools by whether or not they hired at least one teacher using an Act 1240 waiver in a given year. To examine if there are differences in academic growth between low- and high-waiver-density districts as Figure 4 might suggest, Table 7 below presents a comparison of average math growth scores over time for districts which hired more than 25 percent of teachers on an Act 1240 waiver for the 2021-22 school year (high-waiver-density districts), districts which hired between 1 and 25 percent of teachers on an Act 1240 waiver for 2021-22 school year (low-waiver-density districts), and districts which hired no waiver teachers in 2021-22 (no-waiver districts). These are the same groupings presented in Table 4.

As in the achievement analysis, we examine the average math growth scores in these three groups of districts for the 2015-16 school year (the last year before the introduction of Act 1240 waivers) and the 2020-21 school year (the most recent year for which growth data is available). In both the 2015-16 and 2020-21 school years, we see almost no gap in math growth scores between the no-waiver and low-waiver-density districts. In contrast, the high-wavier-density districts had growth scores nearly 2 points lower than the no-waiver districts. By the 2020-21 school year, this gap had expanded to a nearly 4 point gap in average math growth scores between the high-waiver-density and no-waiver districts.

The first key takeaway from Table 7 is that **the seven high-waiver-density districts lagged in growth scores before the introduction of the Act 1240 waiver program.** In 2015-16, there was a nearly 2 point difference in average growth scores between the high-waiver-density districts and the districts with no Act 1240 teachers. This reinforces the idea that there are likely underlying structural concerns which both could push a district to hire teachers under an Act 1240 waiver and which could lead to lower levels of academic growth within these districts. Since measures of growth evaluate students in relation to that of students with similar prior-performance, this initial lag in growth scores suggests that these districts struggled to improve their students' outcomes even before they first hired an Act 1240 teacher. This is in contrast to the low-waiver-density districts, which have maintained average growth scores nearly identical to those of the no-waiver districts from to 2015-16 to the present.

The second key takeaway from Table 7 is that **the seven high-waiver-density districts experienced a greater loss in average growth during the six years of the waiver program than other districts in the state.** While the growth scores have remained relatively constant for both the no-waiver and low-waiver-density districts, average growth scores in the high-waiver-density districts have declined by nearly 2.5 points. Such a large decline in student growth scores suggests again that there are underlying factors in these high-waiver-density districts which both not only necessitate the hiring of a large number of Act 1240 waiver teachers, but also contributed to greater struggles with maintaining consistent levels of student growth.

Table 7: Average Math Growth for Waivers Schools Before and After the Introduction of Act 1240 Waivers, 2017-2021

2021-22 Waiver Density	N. Districts	Average Math Growth 2015-16	Average Math Growth 2020-21	Change
None (0% usage)	165	79.8	79.6	-0.1
Low (1-25% usage)	61	79.4	78.9	-0.6
High (>25% usage)	7	78.0	75.7	-2.3

Note: This table examines average growth scores in math over time for three groups of districts: high-waiver-density districts (above 25 percent of teachers employed under an Act 1240 waiver), low-waiver-density districts (1 to 25 percent of teachers employed under an Act 1240 waiver), and no-waiver districts (no teachers employed under an Act 1240 waiver). The average math growth scores in 2015-16 and 2021-22 are shown for each of the three groups, as well as the change over time. The high-waiver-density districts are Helena/West Helena, Osceola, Blytheville, Brinkley, Marvell-Elaine, Camden, and Warren.

In summary, our analysis suggests that the **usage of Act 1240 waivers has no significant impact on a school's academic growth.** Nevertheless, the high usage of Act 1240 wavier in individual districts may be caused by underlying factors that also lead these districts to demonstrate lower levels of academic growth and achievement. In particular, our analysis found that high-waiver-density districts with above 25 percent of teachers hired under an Act 1240 waiver have large gaps in average student-level achievement and academic growth that predate the inception of the Act 1240 wavier program. Since the alternative to using wavier teachers in these districts is likely classrooms with no teacher at all, it seems unlikely that ending or curtailing the waiver program would contribute towards closing these gaps in student achievement and growth. To illuminate the underlying causes both of these gaps and of the extreme reliance on Act 1240 waiver teachers, further examination of the learning environment in high-waiver usage districts is warranted.

Appendix

Figure 5: Relationship Between School English Achievement Levels and Poverty, 2021

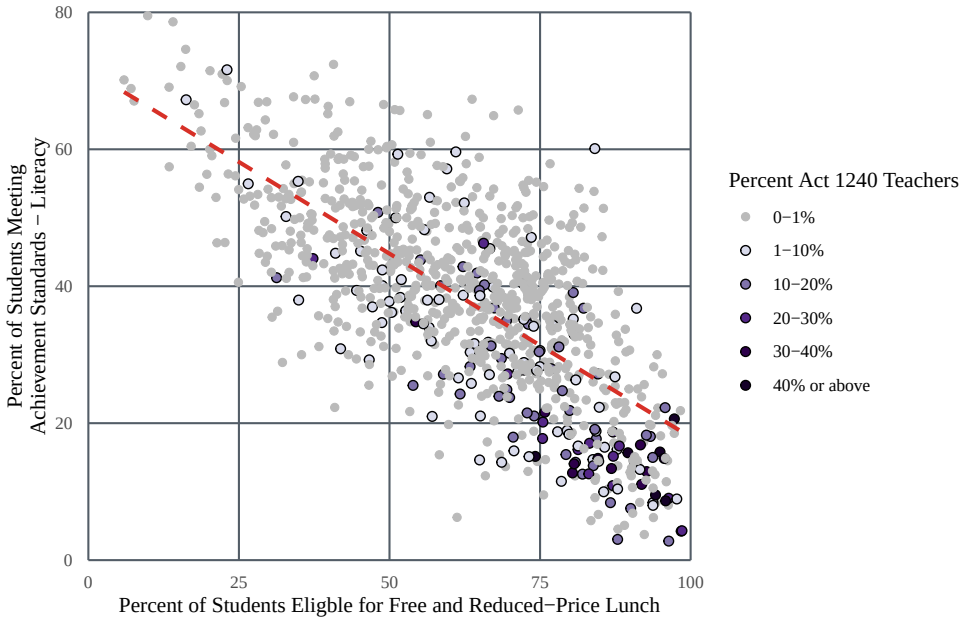


Figure 6: Relationship Between School Literacy Growth Scores and Poverty, 2021