

## **LEGISLATIVE BRIEF**

## Differentiated Pay in Tennessee School Districts

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## Introduction

Broadly speaking, differentiated pay refers to teacher compensation based on factors other than years of experience and education credentials. In Tennessee, a law passed in 2007 requires school districts to develop, adopt, and implement differentiated pay plans with the aim of filling positions in hard-to-staff subject areas and schools and improving the recruitment and retention of highly qualified teachers.<sup>A</sup>

This report addresses the following questions about the implementation of differentiated pay policies in Tennessee and other states:

- How is teacher pay affected by differentiated pay policies?
- Which districts are effectively using differentiated pay policies to attract and keep teachers in hard-to-staff positions?
- Which districts are effectively using differentiated pay policies to reward high performance in the classroom?
- What other states have effectively used differentiated pay as part of their plan to increase student outcomes and retain high quality educators?

The last three questions, taken together, lead to another: What differentiated pay policies are effective in attracting, retaining, and rewarding teachers?

This report presents OREA's research in response to these questions and examines the Tennessee Department of Education's (TDOE) data on the implementation of differentiated pay in school districts for the 2017-18 school year. The general structure of alternative salary schedules (i.e., salary schedules that base raises on teacher performance) in Tennessee is also included.

## Methodology

OREA examined differentiated pay data from Tennessee school districts and compared districts' alternative salary schedules and traditional salary schedules for the 2017-18 school year. OREA restricted its analysis of differentiated pay initiatives to a single school year due to data limitations.

Among the methods employed by OREA are the following:

• updated TDOE's master spreadsheet for differentiated pay implementation data (generated from a general district survey on differentiated pay with a June 2018 deadline and TDOE communications with districts) with data from a follow-up survey for districts that implemented performance initiatives using performance scores released after the general district survey

<sup>&</sup>lt;sup>A</sup> Public Chapter 376 (2007); Tennessee Code Annotated 49-3-306(h).

- generated descriptive statistics on the implementation of differentiated pay initiatives in the 2017-18 school year by disaggregating and analyzing data in TDOE's master spreadsheet on the implementation of differentiated pay in 2017-18
- compiled data on alternative salary schedules in effect for the 2017-18 school year and compared those figures to a TDOE database on salary schedules for the 2017-18 school year
- surveyed district administrators to obtain their perceptions on differentiated pay and categorized their responses to provide a summary of general attitudes
- applied categorizations used in the federal Rural and Low-Income Schools program to look for rural/non-rural trends in the responses to TDOE's implementation survey and OREA's survey on perceptions of differentiated pay
- consulted Tennessee Code Annotated 49-3-306(h) and the State Board of Education's (SBE) Strategic Compensation Policy 5.600 (adopted in 2017)
- researched differentiated pay policies enacted in other states
- reviewed TDOE's 2019 Educator Survey and TDOE reports on strategic compensation
- reviewed the research literature to identify some of the evidence-backed policies for recruiting, retaining, and rewarding teachers

# Section 1: Districts must address high needs subject areas and schools, instructional roles and responsibilities, or performance in their differentiated pay plans.

Districts must submit a differentiated pay plan to TDOE annually for approval. As outlined in SBE policy concerning strategic compensation, differentiated pay plans must specify how districts will compensate educators for at least one of three criteria:<sup>B</sup>

- · high needs subject areas and schools, sometimes referred to as hard-to-staff
- instructional roles and/or responsibilities
- educator performance

The SBE Strategic Compensation Policy provides districts with guidance on how to determine which subject areas and schools qualify as "high needs," though districts have discretion in making these determinations. *High needs schools* are defined by the SBE policy as schools with significant populations of historically disadvantaged students or low-performing students. Schools with low teacher retention or high teacher turnover rates, as well as those with equity gaps or effective teaching gaps (i.e., schools with out-of-field and/or less prepared teachers) may also be designated by a school district as high needs schools under the policy. *High needs subject areas* are generally defined by the policy as content or grade levels that districts struggle to staff, such as high school chemistry or elementary art. Districts are not confined to applying the criteria solely to classroom teachers. Districts may apply the criteria to school counselors, speech pathologists, and other positions they struggle to staff. The SBE policy encourages districts to use data to help determine areas that might benefit from a hard-to-staff incentive.

<sup>&</sup>lt;sup>B</sup> State Board of Education Strategic Compensation Policy 5.600.

The SBE policy defines **instructional roles and responsibilities** as "duties assigned to educators that allow them to build leadership capacity and increase effective educator practice across schools and the district." Examples of positions that meet the instructional roles and responsibilities criteria are instructional coach, teacher mentor, and data coach. Teachers receive extra pay for taking on these additional responsibilities on top of their regular teaching duties. Educators who assume such positions develop their leadership abilities by helping fellow educators improve their teaching skills.

Differentiated pay initiatives that meet the **performance** criteria of the SBE policy must base rewards on educator effectiveness data, such as educators' individual Tennessee Value-Added Assessment System scores (TVAAS), which are based on their students' growth on assessments, and Level of Overall Effectiveness (LOE) scores, which incorporate TVAAS or portfolio scores, observation scores, and an approved achievement measure. Performance criteria can also be satisfied with group accountability data, such as school or district level TVAAS scores.

TDOE has performance data best practices for districts that are not spelled out in the SBE's Strategic Compensation Policy. For example, the department encourages districts to use multi-measure criteria (composites like LOE) to assess teacher performance and discourages the use of a single measure, such as evaluation observations, from being used as the sole means of assessing and rewarding teacher performance. Districts are also discouraged from using performance data from one year to meet differentiated pay requirements for another year. For example, to meet performance criteria

for the 2020-21 school year, districts must use 2020-21 performance data, which will be released in the following 2021-22 school year, or multi-year data to reward educators. Problems with TN Ready assessments in 2017-18 – a major component used in differentiated pay based on performance – led the General Assembly to pass a pair of laws to prevent teachers from being adversely affected by evaluations using 2017-18 TN Ready data.<sup>c</sup> In order to give districts more leeway to comply with legislation, TDOE allowed districts to use prior year data to implement performance initiatives in 2017-18.

Under the SBE policy, schools that adopt State Boardapproved alternative salary schedules, which often take the form of base pay increases determined by educator performance data, meet the performance criteria of the state's differentiated pay policy. Aside from meeting one of the three criteria, differentiated pay plan approval by TDOE is contingent on districts providing evidence that the previous year's differentiated pay plan was implemented.

The law requiring districts to adopt differentiated pay plans was passed in 2007, but district accountability did not begin until 2014. The enactment of TCA 49-3-306(h) in 2007 required school districts to submit an annual differentiated pay plan to the Department of Education. The intent of the legislation was to "aid in staffing hard-to-staff subject areas and schools and

#### How is differentiated pay funded?

Tennessee requires districts to allocate resources for at least one differentiated pay initiative that meets hard-to-staff (high needs schools/subject areas), performance, or instructional roles criteria. Districts fund their differentiated pay initiatives through existing state and local funds or outside grants. Tennessee does not provide dedicated funding for differentiated pay.

Prior to the state's enforcement of differentiated pay policy and guidelines, many districts had differentiated pay plans with language stating their initiatives were subject to available funding. In order to give districts more flexibility to budget for differentiated pay initiatives, SBE set a new state minimum salary schedule in 2013 that moved away from minimum salaries based on years of experience and several tiers of educational training. The new state minimum salary schedule has two tiers for educational training and augments the minimum salary level after teachers' first, sixth, and eleventh years. Most districts have not changed their salary schedule structure following the SBE's actions in 2013.

Many administrators expressed concerns about lack of funding and difficulty in budgeting for differentiated pay in a 2018 survey conducted by OREA.

<sup>&</sup>lt;sup>c</sup> Public Chapter 1026 (2018); Public Chapter 881 (2018).

in hiring and retaining highly qualified teachers." The original law stipulated that the payments made as part of differentiated pay should be supplemental to the salary schedules in place.<sup>D</sup> Districts are required to adopt their own salary schedules that at least meet the minimums for teacher pay set in the state's minimum salary schedule, which at the time (2007) still included five lanes for education credentials and 20 experience steps. (See Appendix A for a sample traditional salary schedule with education lanes and experience steps.)

In 2013, the State Board of Education, in conjunction with changing the state's minimum salary schedule to give districts more flexibility to budget for differentiated pay initiatives, reviewed TCA 49-3-306(h) and differentiated pay guidelines and determined that districts had not fully implemented differentiated pay.<sup>E</sup> This led the board to revise and clarify its differentiated pay guidelines and begin assisting districts with the implementation of differentiated pay plan requirements. Following the board's actions, the Department of Education began checking district differentiated pay plans for compliance, starting with the 2014-15 school year.

Prior to the start of the 2017-18 school year, SBE formalized its guidelines with the creation of Strategic Compensation Policy 5.600, which provides districts with greater clarity on differentiated pay plan requirements.

## Section 2: Differentiated pay data for 2017-18 showed 54 districts paid teachers/educators for filling hard-to-staff positions, 120 paid teachers for filling instructional roles, and 44 instituted a performance pay initiative.

The 2017-18 school year was the first year that districts implemented differentiated pay plans under the guidance of SBE's Strategic Compensation Policy. TDOE's data on districts' implementation of differentiated pay for 2017-18 showed 54 districts paying teachers/educators in hard-to-staff positions, 120 districts paying teachers for filling instructional roles, and 44 districts instituting a performance pay initiative.



#### Exhibit I: District Implementation of Differentiated Pay by Criteria Type in 2017-18

Source: OREA analysis of TDOE differentiated pay implementation data.

<sup>&</sup>lt;sup>D</sup> Public Chapter 376 (2007); Tennessee Code Annotated 49-1-302(a).

<sup>&</sup>lt;sup>E</sup> Some districts began using differentiated pay in the early 2010s following passage of the 2010 First to the Top Act.

Although more districts implemented differentiated pay to reward instructional roles, districts using performance measure criteria for differentiated pay generally saw a higher proportion of their teachers receive payouts.<sup>F</sup> By and large, more teachers are impacted by performance initiatives because of the fact that performance rewards are usually available to all teachers who meet the performance benchmarks set by districts. The number of hard-to-staff and instructional roles positions, on the other hand, are commonly set by districts before the start of the school year and the number of recipients is usually more limited, sometimes in the single digits.

As the most popular differentiated pay criteria used by districts, instructional roles initiatives are often implemented in conjunction with initiatives for one of the other criteria types. (See Exhibit 1.) In fact, 42 out of 54 districts that implemented hard-to-staff initiatives in 2017-18 also met the instructional roles criteria. Out of the 44 districts that implemented performance initiatives, 24 did so in conjunction with instructional roles initiatives. As discussed in the research summary of this report (Section 5), teacher supports delivered via instructional roles may bolster efforts to retain teachers, especially new teachers.<sup>1,2</sup>

Even though OREA is not confident in reporting average payouts due to discrepancies in the reporting of differentiated pay costs (discussed in more detail in Section 6), hard-to-staff initiatives consistently had some of the largest payouts – often awarding thousands of dollars.

In terms of the popularity of differentiated pay with district administrators, 80 percent indicated they would implement a differentiated pay plan in their district even if not required by state law, according to a 2018 OREA survey. Of total administrator responses, 73 percent of those from rural districts (45 out of 62) expressed their intent to adopt differentiated pay absent a state law. In contrast, 94 percent of those from non-rural districts (33 out of 35) expressed their commitment to differentiated pay initiatives absent a state law.<sup>G</sup>

The rural/non-rural split is also reflected when administrators were questioned as to whether differentiated pay is effective at filling hard-to-staff schools. Twenty-nine percent of administrators from rural districts perceived differentiated pay as somewhat effective, very effective, or extremely effective at filling positions in hard-to-staff schools. Non-rural districts saw differentiated pay more favorably in this respect, with 49 percent of administrators viewing differentiated pay initiatives as somewhat effective or better. When asked about the effectiveness of differentiated pay to address hard-to-staff subject areas, 48 percent of administrators from rural districts and 60 percent of administrators from non-rural districts saw differentiated pay as somewhat effective or better.

The survey of district administrators also revealed some opinions on the most positive and negative aspects of differentiated pay. The most common benefits of differentiated pay cited by district administrators were incentives for teachers to take on additional instructional roles, improve performance, and fill hard-to-staff positions. The second most common type of positive comments dealt with differentiated pay's ability to help with the recruitment of teachers and, to a lesser degree, retention.

Perceptions of unfairness on the part of teachers and negative effects on teacher morale were the most common criticisms expressed by district administrators about differentiated pay. District administrators also cited lack of funding and difficulty in budgeting for differentiated pay.

<sup>&</sup>lt;sup>F</sup> OREA found that the impact of hard-to-staff and instructional roles initiatives were sometimes inflated by the inclusion of ineligible positions. Although performance payouts are usually dependent on individual performance benchmarks that only apply to educators, OREA could not verify that ineligible positions were omitted from reported counts.

<sup>&</sup>lt;sup>G</sup> Districts' rural designation drawn from data on the federal Rural and Low-Income School Program.

## Section 3: Most differentiated pay initiatives provide teachers with bonuses rather than increases to base pay.

Most differentiated pay initiatives provide teachers with a bonus to supplement their base pay as opposed to a permanent increase in base salary. Depending on the district and teachers' individual circumstances, teachers may also be eligible for other base pay supplements: coaching supplements, payments stemming from salary equity funds, instructional bonuses, bonuses for attaining national board certification, and longevity bonuses, among others. Bonus payments to teachers for differentiated pay may well coexist with other types of base pay supplements.

#### Hard-to-staff

Of the 54 districts that implemented hard-to-staff initiatives in the 2017-18 school year, 34 districts rewarded teachers with a bonus. Of those districts, 15 offered a signing bonus and six offered a retention bonus. Thirteen districts offered both recruitment and retention bonuses.

As an example, according to TDOE's data, Claiborne County<sup>H</sup> provided an average payout of \$5,934 to six teachers in 2017-18. The district offered a \$2,000 signing bonus to two high school math teachers and an economics teacher. Three high school math teachers were also eligible for a retention bonus of \$5,000 per semester if they taught an additional class. OREA confirmed the accuracy of this data by contacting Claiborne County and learned that one of the math classes was taught by different math teachers in the fall and spring semesters, which means Claiborne County provided a payout to seven teachers.<sup>L3</sup>

#### Performance

Of the 44 districts that rewarded teachers as part of a performance initiative in 2017-18, 35 reported payouts with bonuses exclusively. The other nine districts implemented alternative salary schedules that provide teachers with performance-based salary increases.

One example of a district that provided bonuses based on performance was Jefferson County.<sup>J</sup> Teachers that received LOE scores of 3, 4, and 5 received bonuses of \$219.70, \$439.40, and \$659.10, respectively. Using TDOE's data, the average performance bonus in Jefferson County was calculated at \$636 and about 94 percent of its teachers were impacted. OREA confirmed the accuracy of this data by contacting Jefferson County and learned that the district's reported costs included payroll costs such as Social Security contributions. When those are factored out, the average performance bonus for Jefferson County was \$539.<sup>4</sup>

Problems with TN Ready testing – a major component used in differentiated pay based on performance – led the General Assembly to pass legislation stipulating that performance data generated from the 2017-18 TN Ready assessments could not be used as the basis for compensation decisions or to adversely affect teachers.<sup>K</sup> TDOE subsequently permitted educators to nullify their evaluation scores for 2017-18. TDOE also provided districts the flexibility to maintain compliance with differentiated pay performance criteria in various ways including using observation scores as opposed to LOE scores, using 2016-17 LOE scores for teachers that nullified their 2017-18 LOE scores, using 2016-17 LOE scores for teachers that nullified their 2017-18 TN Ready assessments.

<sup>&</sup>lt;sup>H</sup> District chosen based on completeness of data.

<sup>&</sup>lt;sup>1</sup> One of the math classes associated with a retention bonus was occupied by a teacher that went on leave. The bonus was prorated accordingly.

<sup>&</sup>lt;sup>J</sup>District chosen based on completeness of data.

<sup>&</sup>lt;sup>K</sup>Public Chapter 1026 (2018); Public Chapter 881 (2018).

#### Instructional roles

TDOE does not ask districts to report on the type of payout for instructional roles. Given that compensation for filling instructional roles is generally contingent on teachers taking on extra duties temporarily, payouts were treated as bonuses.

Manchester City Schools,<sup>L</sup> for example, provided payouts of \$2,000 to seven mentor teachers in 2017-18. The district also provided payouts of \$4,500 to three master teachers who helped support the development of teaching staff.<sup>5</sup>

### Section 4: Nineteen Tennessee districts use an alternative salary schedule that either bases teacher pay increases on performance or does not provide (or limits) higher pay to teachers with advanced degrees.

As defined in the State Board of Education's Strategic Compensation Policy, alternative salary schedules use some component, often performance criteria, in addition to or in place of the traditional determinants of teachers' base pay: education and experience. Alternative salary schedules also "significantly deviate from the state minimum salary schedule, such as not automatically recognizing advanced degrees at the master's level or providing base pay increases based on performance data."<sup>6</sup> Alternative salary schedules are submitted by districts to the SBE for approval and must be reapproved every three years. (See Appendix B for a list of districts with alternative salary schedules in the 2017-18 school year.)

Of the 19 Tennessee districts with an approved alternative salary schedule for the 2017-18 school year, 12 implemented salary schedules with performance-based raises. The other seven districts, including the Achievement School District, either do not reward teachers for advanced degrees, restrict rewards to certain advanced degrees, or did not implement an alternative salary schedule for the 2017-18 school year.<sup>M</sup>

Most districts with performance-based alternative salary schedules base pay increase amounts on teachers' evaluation scores. The most common configuration of the usually uniform incremental raises is for teachers to receive pay raises equal to three uniform increments if they achieve an LOE score of 5, two increments if they receive an LOE score of 4, and one increment if they attain an LOE score of 3. (See Appendix A for an example.)

Nine of the 12 districts that offer performance-based raises do so using uniform increments according to LOE scores, with the other three districts providing raises as a percentage of base pay or according to a schedule of non-uniform raises. Based on the nine alternative salary schedules reviewed, teachers who received an LOE score of 5 in 2017-18 were slated to receive a raise of \$924 on average. The average scheduled raise for teachers receiving an LOE score of 4 or 3 was \$641 and \$347, respectively. Typically, alternative salary districts do not provide raises for evaluation scores below 3, though some districts have a separate, introductory salary schedule for new teachers that provides pay increases regardless of evaluation score for a limited time period (e.g., the first three years). In districts on traditional salary schedules, the average scheduled raise for teachers with only a bachelor's degree during their first 10 years in the profession was \$619 in 2017-18. That figure rises to \$715 for teachers with a master's degree.

<sup>&</sup>lt;sup>L</sup> District chosen based on completeness of data.

<sup>&</sup>lt;sup>M</sup> An alternative salary schedule with performance-based raises was approved for use in Shelby County Schools in 2017-18, but the district chose not to implement the schedule that year.

Exhibit 2: Average scheduled salary raises in alternative and traditional salary schedule districts for teachers with bachelor's degrees in 2017-18

Teacher Level of Effectiveness	Average Base Pay Increase		
Level 5 Teacher in an alternative salary schedule district	\$924		
Level 4 Teacher in an alternative salary schedule district	\$641		
Any Level - Teacher in a traditional salary schedule district	\$619		
Level 3 Teacher in an alternative salary schedule district	\$347		

Notes:

• Average base pay increase for traditional salary schedule district is for the first 10 years in the salary schedule.

• Calculations for alternative salary districts restricted to nine districts that offer performance-based raises using uniform increments according to LOE scores.

Source: 2017-18 salary schedules retrieved from TDOE website.

The two alternative salary districts that offered the largest scheduled base pay increase to teachers in the 2017-18 school year were Haywood County and Rhea County.

## Exhibit 3: Alternative salary districts offering the largest scheduled base pay increases to teachers with a bachelor's degree in the 2017-18 school year

			Base Pay Increases by LOE Score		
District	Starting Salary	Max Salary	LOE 5	LOE 4	LOE 3
Rhea County \$35,000 \$		\$59,000	\$1,200	\$800	\$400
Haywood County	\$34,725	\$60,995	\$1,065	\$710	\$355

Note: Shelby County's alternative salary schedule had the largest base pay increases, but the district chose not to implement the schedule for the 2017-18 school year.

Source: 2017-18 salary schedules retrieved from TDOE website.

## Section 5: Research finds base pay increases and bonuses have positive impacts on teacher recruitment and retention.

#### Base pay increases and bonuses

Most rewards in the differentiated pay programs used in Tennessee's school districts can be classified as either bonuses or base pay increases. According to research, higher salaries (from increases in base pay) are associated with better recruitment rates of targeted teachers and higher retention rates for teachers at all stages of their careers, but especially for teachers with more than five years of teaching experience. The research into the effect of bonuses on teacher recruitment/retention is largely favorable as well.<sup>7,8,9,10</sup>

#### Tennessee-based research on base pay increases and bonuses

Looking at Tennessee-specific research, a \$5,000 retention bonus program (active between 2011 and 2014) for Priority School teachers with an overall evaluation score of 5 (the highest rating on a 1 to 5 scale) was found to increase the retention of those teachers by about 20 percent when compared to other teachers just below the reward cutoff.<sup>11</sup> Furthermore, a follow-up study by the same researchers estimated a sizeable positive difference in teacher effectiveness between the retained teachers and their likely replacements. The follow-up study also found participating schools saw greater test score gains

in subsequent years, especially on state reading exams, when compared to otherwise similar non-participant schools.<sup>12</sup>

A study of various federally funded strategic compensation programs in Tennessee between 2010 and 2016 found mixed results. Some programs offered bonuses while others offered bonuses and base pay increases. In bonus-only schools, researchers found no evidence of increased teacher retention, though they did find some evidence that the teacher turnover rate at schools with performance-based bonuses was disproportionately concentrated among teachers with low TVAAS scores. Schools that offered performance-based base pay increases and bonuses, however, saw an increase in teacher retention in the second and third years of the three-year retention analysis, and in the second year this increase was statistically significant.<sup>13</sup>

#### Non-pay incentives to recruit and retain teachers

In addition to increased pay as a method for the recruitment and retention of teachers, certain non-pay incentives can also be effective. An extensive amount of research suggests that mentoring

programs – which Tennessee districts can use to comply with differentiated pay requirements – are effective at reducing turnover from the teaching profession among novice teachers.<sup>14</sup> One national study of induction programs found that first-year teachers who receive a comprehensive set of early career supports – "having a mentor from the same field, common planning time with other teachers in the same subject, regularly scheduled collaboration with other teachers, and being part of an external network of teachers" – were twice as likely to remain in teaching when compared to teachers who received none of those supports.<sup>15,16</sup> A thorough analysis might also account for non-pay factors associated with teacher recruitment and retention and other initiatives designed to recruit or retain teachers.

## Other than pay, what else affects teacher attrition?

Many of the top causes of teacher attrition are not directly related to pay. Excessive workloads, dissatisfaction with high-stakes testing, disruptive student behavior, and poor leadership and administration have been ranked higher by teachers as reasons for leaving the profession than pay issues. A thorough analysis of the effects of differentiated pay initiatives on the recruitment and retention of teachers should therefore account for such non-monetary factors, as well as market forces and other variables.

Retaining new teachers has special relevance to Tennessee, where 19 percent of the teacher workforce is made up of first- and second-year teachers, the highest proportion of new teachers in the United States, according to a 2018 report by the Learning Policy Institute.<sup>17</sup> Seventy percent of first-year teachers that responded to TDOE's 2019 Tennessee Educator Survey indicated that they had been assigned a mentor. Survey results on the quality of mentorship received indicated about one quarter of first-year teachers were not involved in observations or collaborative activities, and two-thirds reported that mentoring activities were infrequent.<sup>18</sup>

There is also evidence that tuition loan forgiveness can be a useful tool to recruit and retain teachers. In a study of Florida's Critical Teacher Shortage Program that ran from the mid-80s through 2011, researchers found loan forgiveness significantly reduced the probability of exit for middle and high school science and math teachers by 8.9 percent and 10.4 percent, respectively.<sup>19</sup> Although districts in Tennessee haven't employed loan forgiveness programs in their differentiated pay plans, several districts offer tuition reimbursement to teachers who earn an extra certification in a hard-to-staff subject.

## Section 6: OREA was unable to evaluate the effectiveness of differentiated pay policies in Tennessee because the available data is incomplete, contains inaccuracies, and does not link specific initiatives to individual teachers.

Although in recent years TDOE has streamlined and standardized the process followed by districts when submitting differentiated pay data to the state through an online survey tool, the quality and specificity of the data remains insufficient for answering questions about effectiveness of the policy.

Data quality is compromised by the inclusion within district data of payouts that do not qualify as differentiated pay. Conversely, some districts do not report initiatives that qualify as differentiated pay. TDOE contacts districts in an effort to ensure proper reporting, and the department has detected misreporting by districts through these contacts. OREA nevertheless found that some ineligible roles were included in district differentiated pay data for the 2017-18 school year. Since payouts are not linked to individual teachers, teachers who received multiple payout awards may have been counted more than once in differentiated pay data (e.g., a teacher who filled both a hard-to-staff position and an additional instructional role).

DOE survey questions leave room for interpretation that can lead to inconsistent responses from districts. For example, one differentiated pay survey question asks for the "actual total cost of [the] performance-based component," which at least one district interpreted as inclusive of payroll costs (e.g., Social Security). For districts that provided an itemized list of payouts to educators, OREA found instances where the reported costs equaled the sum of payouts and other instances where the reported costs were greater than the sum of payouts. In addition, the survey is designed to capture hard-to-staff payout data for teachers but does not ask whether any non-teachers also received a hard-to-staff payout. Some districts awarded differentiated pay to non-teacher recipients such as speech language pathologists and counselors, however. In the absence of a separate query on the survey about non-teacher recipients, OREA found that these districts frequently grouped teachers and non-teachers together when reporting their differentiated pay data.

Differentiated pay data is also not linked to specific teachers. The data is instead aggregated at the district level by differentiated pay type (i.e., hard-to-staff, instructional roles and responsibilities, and performance). Further complicating the situation, districts often implement multiple initiatives under the same criteria umbrella (e.g., offering transfer, recruitment, and retention incentives for hard-to-staff positions) or initiatives with several conditional payout options (e.g., offering a scale of performance payouts dependent on teachers' LOE scores). In their reporting instructions to districts, the department asks that an itemized list of compensation per educator be reported, but districts often do not provide such a list.

Apart from the survey, districts may also report differentiated pay data through TDOE's personnel database. OREA found districts do not consistently report differentiated pay data in the personnel database, however. For the 2017-18 school year, 49 districts did not report any differentiated pay compensation to teachers in the personnel database. Further, although nearly half of districts report implementing multiple differentiated pay criteria, the database uses a single reporting field to capture differentiated pay data. This means districts cannot associate the data with a particular differentiated pay initiative or report which of the three differentiated pay criteria categories it falls into.

## Section 7: States are experimenting with many types of differentiated pay policies.

OREA found numerous policy examples from other states for each of the three differentiated pay policy criteria used in Tennessee: hard-to-staff (high needs schools/subject areas), performance, and instructional roles. A specific differentiated pay mechanism (e.g., pay raises are restricted to those teachers rated as effective based on performance) is the policy in place for all teachers in some states. Also, some states provide direct funding for differentiated pay initiatives. Although Tennessee has not appropriated dedicated funding for differentiated pay, it requires districts to allocate resources for at least one differentiated pay initiative that meets hard-to-staff (high needs schools/subject areas), performance, or instructional roles criteria.<sup>N</sup>

**High needs schools:** At the end of the 2017-18 school year, 25 states were either allocating funding for additional compensation to teachers in high-need schools or, like Tennessee, encouraging districts to provide funding for this purpose.<sup>20</sup>

Some states are funding efforts to address teacher recruitment challenges in specific geographic areas. South Carolina, for example, has enacted a policy called the Rural Recruitment Initiative that provides teachers in an eligible rural school an additional \$1,500 per year.<sup>21</sup>

**High needs subjects:** As of the end of the 2017-18 school year, 17 states, including Tennessee, encouraged districts to provide additional compensation to teachers in shortage subject areas.<sup>22</sup>

One example of a state program aimed at addressing critical need areas is Utah's Teacher Salary Supplement Program, which rewards teachers with degrees corresponding to a critical shortage subject with a bonus of up to \$4,100.

To improve recruitment into high needs subjects, Nebraska's Attracting Excellence to Teaching program provides teacher candidates working toward certification in shortage areas with annual access to \$3,000 in forgivable loans for up to five years. After candidates earn their certification and teach full-time for two years at a Nebraska school, their loans are forgiven at a rate of \$3,000 per year.<sup>23</sup>

**Educator performance:** As of 2018, there were 10 states that required districts to compensate teachers for effective performance, and another 15 that explicitly encouraged districts to consider performance pay. Tennessee falls into the latter category.<sup>24</sup>

Florida law requires that all teachers hired after 2011 be placed on a salary schedule with pay raises only available to teachers rated as effective based on performance.<sup>o</sup> This type of salary schedule is similar to the alternative salary schedules used in some Tennessee districts.

Utah has a program that offers a bonus of up to \$5,000 to effective teachers, as gauged by achieving a median growth percentile of 70 or higher on tested subjects, employed in high-poverty schools.<sup>25</sup> The program's combination of performance-based pay for teachers in certain schools resembles the differentiated pay initiatives of some Tennessee districts that link together performance and hard-to-staff initiatives.

**Instructional roles:** The use of roles like teacher mentors and instructional coaches is a commonplace practice in K-12 education. There are 16 states, however, that provide dedicated funding to support teacher induction programs as of the 2015-16 school year.<sup>26</sup>

<sup>&</sup>lt;sup>N</sup> Several Tennessee districts have used competitive grant dollars provided by the federal government to fund differentiated pay initiatives. <sup>o</sup> Florida statute 1012.22

For example, Delaware's Comprehensive Induction Program requires that all new teachers participate in its four-year program in order to advance their licenses. The program requires weekly meetings between mentor and novice teachers, eight lesson observations in the first two years (four as an observer and four being observed), and professional learning communities specifically for new teachers. The program includes competitive grants to fund the development and/or the delivery of innovative induction models by districts for new teachers.<sup>27</sup>

## Section 8: Policy considerations

The following policy considerations address how differentiated pay data could be improved so that OREA might then answer questions about the effectiveness of such pay initiatives. Implementation of these policy considerations may require funding for additional staff, information system changes, and other costs. Although these policy considerations are addressed to TDOE, it is important to note that districts also play an important role in improving differentiated pay data. OREA's examination of data for the 2017-18 school year found many instances where districts did not adhere to the guidance provided by TDOE.

In order to improve the data collection process for differentiated pay, the Department of Education may wish to consider the following policy considerations:

## 1. Update the data collection process so that payouts for specific differentiated pay initiatives are linked to individual recipients.

TDOE surveys of districts currently collect aggregated data by differentiated pay criteria. A reporting process that links specific differentiated pay initiatives to individual recipients would allow researchers to better gauge the effects of various types of differentiated pay. More specific data would also enable researchers to incorporate information from other databases, such as data on teacher characteristics and other sources of supplemental teacher income, into analyses of differentiated pay.

## 2. Include more prominent guidance and clearer explanations on how districts should respond to survey questions and include additional survey questions.

The survey developed by the department to collect differentiated pay data from districts includes guidance on how districts should respond to certain differentiated pay questions, but such guidance may not be seen or understood by districts. For example, a survey question about the total cost of implementation specifies that districts should provide the "total paid out to all teachers," but this guidance is in a grey, relatively small font below the entry box on the survey and may be overlooked by survey respondents. Although the software does not permit a more prominent font for guidance below the questions, TDOE may wish to reiterate and highlight the guidance elsewhere in the survey.

In addition, some survey questions might be improved by rewording the question or providing more explanation. The format of the question about the total cost of implementation discussed above is "Actual total cost of the \_\_\_\_\_ component." OREA found some districts interpreted this survey question as inclusive of payroll costs and possibly other implementation expenses. In order to provide districts with more clarity, the question might be reworded to request "Actual total *payouts* of the \_\_\_\_\_ component" along with an explanation of what district expenses should not be included.

OREA also found some districts may report the *number of roles* that received differentiated pay as opposed to the *number of teachers* in cases where a payout is tied with a specific role occupied by multiple teachers. The wording of this survey question might be revised or an additional explanation included so that districts provide the number of teachers that received differentiated pay when

answering this survey question. More detailed explanations might also guide districts to distinguish among the different types of bonuses that may be used for hard-to-staff criteria.

The survey instrument might also include an additional entry field for districts to report non-teacher recipients of hard-to-staff payments. OREA found it difficult to separate teachers from non-teachers, such as speech pathologists, when analyzing the number of recipients of hard-to-staff payments. This difficulty was compounded in cases where districts did not fully answer a survey question about the payout amount individuals received per hard-to-staff role.

## 3. Issue more frequent communications to improve the completeness and accuracy of the differentiated pay data reported by districts.

More frequent communications from TDOE to school districts, especially after the collection of differentiated pay plan data and after districts submit their differentiated pay implementation data to the department, should help improve the completeness and accuracy of the data. Communications between the department and districts are particularly important for identifying and resolving incomplete and inaccurate district responses to survey questions and may also inform additional changes to DOE survey questions to further improve the quality of differentiated pay data.

## Appendix A: Examples of a traditional and an alternative salary schedule

#### Example of Traditional Salary Schedule

Years of Experience	Bachelor's	Master's	Master's +30	Ed.S.	PhD
0	\$35,618	\$38,778	\$41,421	\$42,936	\$45,927
I	36,892	39,566	42,767	44,261	47,509
2	37,141	39,811	43,012	44,507	47,754
3	37,147	40,440	43,681	45,218	48,541
4	37,709	41,266	44,533	46,127	49,556
5	38,476	42,158	45,477	47,078	50,575
6	39,470	43,288	46,667	48,343	51,955
7	40,287	44,224	47,638	49,368	53,059
8	41,433	45,539	49,012	50,827	54,662
9	42,290	46,506	50,054	51,909	55,840
10	42,475	46,721	50,289	52,126	56,054
II	43,769	47,916	51,352	53,220	57,240
12	43,777	47,937	51,541	53,453	57,491
13	44,470	48,970	52,642	54,578	58,719
14	44,678	49,212	52,854	54,807	58,938
15	45,609	50,257	54,265	55,965	60,195
16	45,613	50,260	54,269	55,973	60,204
17	46,365	51,125	54,888	56,950	61,283
18	46,369	51,129	54,892	56,954	61,290
19	47,146	52,016	55,842	57,954	62,402
20	47,150	52,021	55,846	57,958	62,405
21	47,429	52,024	55,850	57,963	62,409
22	47,728	52,027	55,854	57,967	62,412
23	48,048	52,03 I	55,858	57,970	62,415
24	48,390	52,269	55,862	57,974	62,418
25	48,756	52,525	55,867	57,978	62,423
26	49,149	52,798	56,154	57,981	62,426
27	49,568	53,092	56,462	57,985	62,429
28	50,016	53,405	56,790	58,260	62,432
29	50,498	53,740	56,801	58,418	62,321
30+	51,011	54,099	57,143	58,868	62,439

All teachers with the same years of experience and education level would make the same base pay.

#### Example of Alternative Salary Schedule

#### **New Teacher Pay Schedule**

New teachers hired will use a defined schedule, moving forward one step per year, regardless of Overall TEAM LOE level, unless their data moves them further on the scale. After year 3, teachers will fall into the single-lane schedule. New teachers with previous teaching experience will slot into the single-lane schedule based on a predetermined formula.

Year	Bachelor's	Advanced
I	\$36,500	\$41,000
2	\$37,000	\$41,500
3	\$38,000 (Proceed to Step 0)	\$42,500 (Proceed to Step 15)

	Schedule		Schedule	Step	Schedule	Teachers may progress forward on the single-
Step 0		Step			\$ 56,000	lane pay schedule based on overall evaluation
	\$ 38,000	30	\$ 47,000	60		(TEAM) performance and/or advanced
	\$ 38,300	31	\$ 47,300	61	\$ 56,300	degree attainment.
2	\$ 38,600	32	\$ 47,600	62	\$ 56,600	
3	\$ 38,900	33	\$ 47,900	63	\$ 56,900	Evaluation Performance
4	\$ 39,200	34	\$ 48,200	64	\$ 57,200	TEAM Level $5 = +3$ Steps TEAM Level $4 = +2$ Steps
5	\$ 39,500	35	\$ 48,500	65	\$ 57,500	TEAM Level $4 = \pm 2$ Steps TEAM Level $3 = \pm 1$ Step
6	\$ 39,800	36	\$ 48,800	66	\$ 57,800	
7	\$ 40,100	37	\$ 49,100	67	\$ 58,100	Advanced Degree Attainment
8	\$ 40,400	38	\$ 49,400	68	\$ 58,400	1st advanced degree = +10 Steps
9	\$ 40,700	39	\$ 49,700	69	\$ 58,700	2nd advanced degree = $+5$ Steps
10	\$ 41,000	40	\$ 50,000	70	\$ 59,000	3rd advanced degree = +3 Steps
11	\$ 41,300	41	\$ 50,300	71	\$ 59,300	
12	\$ 41,600	42	\$ 50,600	72	\$ 59,600	
13	\$ 41,900	43	\$ 50,900	73	\$ 59,900	
14	\$ 42,200	44	\$51,200	74	\$ 60,200	
15	\$ 42,500	45	\$ 51,500	75	\$ 60,500	
16	\$ 42,800	46	\$51,800	76	\$ 60,800	
17	\$ 43,100	47	\$ 52,100	77	\$61,100	
81	\$ 43,400	48	\$ 52,400	78	\$ 61,400	
19	\$ 43,700	49	\$ 52,700	79	\$61,700	
20	\$ 44,000	50	\$ 53,000	80	\$ 62,000	
21	\$ 44,300	51	\$ 53,300	81	\$ 62,300	
22	\$ 44,600	52	\$ 53,600	82	\$ 62,600	
23	\$ 44,900	53	\$ 53,900	83	\$ 62,900	
24	\$ 45,200	54	\$ 54,200	84	\$ 63,200	
25	\$ 45,500	55	\$ 54,500	85	\$ 63,500	
26	\$ 45,800	56	\$ 54,800	86	\$ 63,800	
27	\$ 46,100	57	\$ 55,100	87	\$ 64,100	
28	\$ 46,400	58	\$ 55,400	88	\$ 64,400	
29	\$ 46,700	59	\$ 55,700	89	\$ 64,700	
				90	\$ 65,000	

#### Single-Lane Pay Schedule

## Appendix B: Districts with an approved alternative salary schedule in the 2017-18 school year

District	Performance-based Raises	Type of Salary Increase
Chester County	Yes	Fixed amount by LOE
Haywood County	Yes	Fixed amount by LOE
Johnson County	Yes	Fixed amount by LOE
Kingsport City	Yes	Fixed amount by LOE
Lincoln County	Yes	Fixed amount by LOE
Putnam County	Yes	Fixed amount by LOE
Rhea County	Yes	Fixed amount by LOE
Sequatchie County	Yes	Fixed amount by LOE
Shelby County	Yes	Fixed amount by LOE The district's alternative salary schedule was not implemented for the 2017-18 school year.
Wilson County	Yes	Fixed amount by LOE
Gibson County Special District	Yes	Size of raise determined by place in salary schedule (Teachers with an LOE of 3 or greater move up one step in the salary schedule.)
Trousdale County	Yes	Percentage of base pay dependent on LOE
Lexington City <sup>P</sup>	Yes	Percentage of base pay dependent on LOE
Achievement School District	No	Experience-based raises according to schedule
Fentress County	No	Experience-based raises according to schedule
Hawkins County	No	Experience-based raises according to schedule
Millington City	No	Experience-based raises according to schedule
Sweetwater City	No	Experience-based raises according to schedule
Union County	No	Experience-based raises according to schedule

<sup>&</sup>lt;sup>P</sup> Lexington City Schools allows teachers to opt into their alternative salary schedule. Otherwise, teachers remain on a traditional salary schedule.

### Endnotes

<sup>1</sup> Geoffrey D. Borman and N. Maritza Dowling, "Teacher Attrition and Retention: A Meta-Analytic and Narrative Review of the Research," *American Educational Research*, Vol. 78, No. 3, Sept. 2008, pp. 367-409.

<sup>2</sup> Sam Brill and Abby McCartney, "Stopping the Revolving Door: Increasing Teacher Retention," *Politics and Policy*, Vol. 36, No. 5, 2008, pp. 750-774.

<sup>3</sup> Phone interview with Accountability Instructional Supervisor of Claiborne County Schools, Oct. 3, 2019.

<sup>4</sup> Email correspondence with the Director of Federal Programs, Curriculum Grades Prek-5, and Accountability at Jefferson County Schools, Oct. 3, 2019.

<sup>5</sup> Email correspondence with Director of Schools at Manchester City Schools, Oct. 3, 2019.

<sup>6</sup> State Board of Education Strategic Compensation Policy 5.600.

<sup>7</sup> Luis A. Rodriguez, Matthew G. Springer, and Walker A. Swain, "Effective Teacher Retention Bonuses: Evidence from Tennessee," *Educational Evaluation and Policy Analysis*, Vol. 38, No. 2, June 2016, pp. 199-221.

<sup>8</sup> Charles Clotfelter et al, "Would Higher Salaries Keep Teachers in High-Poverty Schools? Evidence from a Policy Intervention in North Carolina," *Journal of Public Economics*, Vol. 92, 2008, pp. 1352-1370.

<sup>9</sup> United States Department of Education, Institute of Education Sciences, *Transfer Incentives for High-Performing Teachers: Final Results from a Multisite Randomized Experiment*, Nov. 2013, <u>https://ies.ed.gov/ncee/pubs/20144003/pdf/20144003.pdf</u>.

<sup>10</sup> Li Feng and Tim R. Sass, "The Impact of Incentives to Recruit and Retain Teachers in 'Hard-to-Staff' Subjects," *Journal of Policy Analysis and Management*, Vol. 37, No. 1, 2018, pp. 112-135.

<sup>11</sup> Luis A. Rodriguez, Matthew G. Springer, and Walker A. Swain, "Effective Teacher Retention Bonuses: Evidence from Tennessee," *Educational Evaluation and Policy Analysis*, Vol. 38, No. 2, June 2016, p.12.

<sup>12</sup> Luis A. Rodriguez, Matthew G. Springer, and Walker A. Swain, "Selective Retention Bonuses for Highly Effective Teachers in High Poverty Schools: Evidence from Tennessee," *Economics of Education Review*, Vol. 68, 2019, pp. 148-160.

<sup>13</sup> Vanderbilt University, Tennessee Education Research Alliance, *Final Evaluation Report: Tennessee's Strategic Compensation Programs Findings on Implementation ad Impact 2010-2016*, July 1, 2016, <u>https://peabody.vanderbilt.edu/TERA/files/TIF\_FINAL\_7.1.16.pdf</u>.

<sup>14</sup> Geoffrey D. Borman and N. Maritza Dowling, "Teacher Attrition and Retention: A Meta-Analytic and Narrative Review of the Research," *American Educational Research*, Vol. 78, No. 3, September 2008, pp. 367-409. Sam Brill and Abby McCartney, "Stopping the Revolving Door: Increasing Teacher Retention," *Politics and Policy*, Vol. 36, No. 5, 2008, pp. 750-774. Public Policy Institute of California, *Retention of New Teachers in California*, 2006, <u>https://www.ppic.org/content/pubs/report/</u> <u>R\_206DRR.pdf</u>. <sup>15</sup> Learning Policy Institute, *Taking the Long View: State Efforts to Solve Teacher Shortages by Strengthening the Profession*, Aug. 2018, <u>https://learningpolicyinstitute.org/sites/default/files/</u> <u>product-files/Long\_View\_REPORT.pdf</u>.

<sup>16</sup> Richard Ingersoll and Thomas M. Smith, "Do Teacher Induction and Mentoring Matter?" *NAASP Bulletin*, Vol. 88, No. 638, March 2004, pp. 28-40.

<sup>17</sup> Learning Policy Institute, *Taking the Long View: State Efforts to Solve Teacher Shortages by Strengthening the Profession*, Aug. 2018, <u>https://learningpolicyinstitute.org/sites/default/files/</u> <u>product-files/Long\_View\_REPORT.pdf</u>.

<sup>18</sup> Tennessee Department of Education, Division of Research and Analysis, and Vanderbilt University, Tennessee Education Research Alliance, *Lessons from Our Educators: Tennessee Educator Survey 2019 Results in Context*, 2019, <u>https://www.tn.gov/content/dam/tn/education/data/2019-survey/</u> <u>Survey\_Report.pdf</u>.

<sup>19</sup> Li Feng and Tim R. Sass, "The Impact of Incentives to Recruit and Retain Teachers in 'Hard-to-Staff' Subjects," *Journal of Policy Analysis and Management*, Vol. 37, No. 1, 2018, p. 13.

<sup>20</sup> National Council on Teacher Quality, *Databurst: Strategic Teacher Compensation*, May 2018, <u>https://www.nctq.org/dmsView/Strategic\_Compensation\_Databurst</u>.

<sup>21</sup> Learning Policy Institute, *Taking the Long View: State Efforts to Solve Teacher Shortages by Strengthening the Profession*, Aug. 2018, <u>https://learningpolicyinstitute.org/sites/default/files/product-files/Long\_View\_REPORT.pdf</u>.

<sup>22</sup> National Council on Teacher Quality, *Databurst: Strategic Teacher Compensation*, p. 14.

<sup>23</sup> Learning Policy Institute, *Taking the Long View: State Efforts to Solve Teacher Shortages by Strengthening the Profession*, p. 14.

<sup>24</sup> National Council on Teacher Quality, *Databurst: Strategic Teacher Compensation*, p. 14.

<sup>25</sup> National Council on Teacher Quality, *Databurst: Strategic Teacher Compensation*, p. 15.

<sup>26</sup> New Teacher Center, *Support from the Start: A 50-State Review of Policies on New Educator Induction and Mentoring*, March 2016, <u>https://newteachercenter.org/wp-content/uploads/2016CompleteReportStatePolicies.pdf</u>.

<sup>27</sup> Learning Policy Institute, *Taking the Long View: State Efforts to Solve Teacher Shortages by Strengthening the Profession*, Aug. 2018, p. 13, <u>https://learningpolicyinstitute.org/sites/default/files/</u> <u>product-files/Long\_View\_REPORT.pdf</u>.



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