Ultah FOUNDATION Executive Summary

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TEACHER ATTRITION Why do teachers stop teaching in utah and what policies will encourage them to stay?

Increasing teacher attrition in Utah public schools places our education system at risk for lower teacher quality, greater inequity in student opportunities, and increased inefficiency as more funds are diverted to recruiting and training new teachers. With the current surge in Utah's student population, a wave of baby boomer retirements coming soon, and teachers being drawn away to other states or other careers, the stakes are high for solving this problem. If teacher attrition is not reduced, Utah will experience increasingly severe teacher shortages.

In recent months, Utah school officials and the media have emphasized the relatively low teacher salaries and poor working conditions (e.g., larger class sizes, fewer classroom resources) in Utah as important causes of teacher attrition. A quick look at recent figures confirms that Utah has low relative salaries and high relative class sizes. In 2000, Utah's average teacher salary ranked fifth of the eight mountain states. By 2005 (the latest interstate comparison) Utah ranked sixth, and lagged even further behind its neighboring states, since all the mountain states but Nevada increased salaries at a faster rate than Utah since 2000.

The American Federation of Teachers reports that Utah ranked 45th in the U.S. and next to last in the mountain states for 2004-05 beginning teacher salaries. In addition, Utah has the highest student-teacher



ratio in the nation (22.1), far surpassing its neighbors, which, with the exception of Arizona, all enjoy a student-teacher ratio under $20.^1$

Rates of teacher attrition are increasing for the U.S. and Utah. Many policymakers are especially concerned by the very high rate of attrition among the newest teachers: research suggests that nearly half of new teachers leave teaching within their first five years of teaching.²

CAUSES OF TEACHER ATTRITION IN THE U.S.

The national Teacher Follow-up Survey (TFS) 2000-2001 found that the reasons most often rated as highly important by public school teachers who had left the teaching profession were retirement, pursuit of another career, and better salary or benefits (see Figure 2).

Relative to teachers in other fields, mathematics and social studies teachers were the most likely to report better salary and benefits as a highly important reason for leaving teaching, while special education teachers were the most likely to report dissatisfaction with job responsibilities. Among movers (teachers who switched schools) and "leavers," teachers were most often strongly dissatisfied with lack of planning time, large classes, heavy workloads, low salary, and required professional development activities that did not match career goals.

CAUSES OF TEACHER ATTRITION IN UTAH

The Utah Educator Supply and Demand Study for 2004-2005 reports that the most frequent reasons for teacher turnover include retirement, relocation, and leaving education.

Responding to an informal survey by Utah Foundation, three districts and the Utah State Office of Education (USOE) stated that the most

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effective way to decrease teacher attrition would be better salary and benefits. The districts ranked smaller class sizes as the second most effective method, but USOE placed better mentoring programs and differential pay ahead of smaller class sizes in expected effectiveness.

EVALUATION

This report examines four of the most promising policies to reduce teacher attrition: higher salaries, differentiated salaries, smaller class sizes, and mentoring. We evaluated the policies according to three criteria: efficiency, equity, and administrative feasibility. Equity was analyzed three ways: 1) equity with respect to students, since the most disadvantaged students attend schools with the highest teacher attrition rates and the lowest quality teachers; 2) equitable treatment of teachers by reinforcing the current compensation system; and 3) equitable treatment by recognizing teachers' different working conditions and opportunity costs. We believe that economic theory and the realities of the employment marketplace favor the definition of teacher equity that recognizes working conditions and opportunity costs, rather than preserving the system of tenure- and credentialbased compensation.

Higher Salaries

Efficiency. The national research suggests that better teacher compensation is associated with lower attrition. A 2004 review of research on teacher recruitment and retention by RAND Corporation concluded that higher salaries are associated with lower teacher attrition, that teachers are responsive to salaries in other districts as well as other occupations, and that teachers who leave teaching often cite low salaries as an important reason for job dissatisfaction.³

An across-the-board salary increase may be effective in retaining teachers, but it may not be efficient. Increasing teachers' salaries across the state by 10 percent would cost more than \$100 million.

Equity. This policy would have no impact on the equitable treatment of students because it would not necessarily alter the distribution of quality teachers across student populations. With respect to teachers, the policy is equitable in terms of maintaining the status quo, but inequitable in terms of recognizing working conditions and opportunity costs, since all teachers would receive the same increase regardless of position, student population, etc.

Administrative Feasibility. An across-the-board salary increase would be relatively easy to implement and would involve minimal decision making by individual school officials.

Differentiated Salaries

Efficiency. Differential pay is potentially more cost-effective than across-the-board salary increases because it directs resources towards teacher positions with shortages and the highest amounts of attrition. The cost of this policy alternative would depend on the criteria used to determine shortage areas as well as the existing salaries of teachers working in these positions. Clearly, differentiated salaries could be less expensive than higher salaries for all teachers.

Equity. Differential pay would promote equity with respect to students by increasing the equitable distribution of teachers across student populations if teachers receive additional compensation for working in more challenging schools. Because this policy recognizes different working conditions and opportunity costs, it treats teachers more equitably in one sense, but may be perceived as unfair by teachers who expect teacher compensation policies to maintain the current salary structure.

Administrative Feasibility. Differential pay is more difficult to implement than an across-the-board salary increase because it would introduce greater complexity into the payroll system. Successful implementation would be dependent on accurate information about shortages and personnel, as well as the discretion of state officials and district administrators.

Smaller Class Sizes

Efficiency. Some researchers have concluded that teacher mobility is more strongly related to working conditions than teacher salaries.⁴ RAND researchers found some evidence that larger class sizes were associated with higher attrition rates. The cost of class size reduction varies considerably based on the size, scope and design of the policy. Notably, class size reduction is more expensive to implement during a time of growing student enrollment. According to a January 2007 USOE estimate, a reduction of one in the pupil-teacher ratio for K-6, as well as secondary math, science and language arts teachers would cost about \$37.5 million in additional teachers' salaries and \$293 million in facilities, or more than \$330 million in additional funding.⁵

Although smaller class sizes would improve teacher working conditions and would be likely to decrease the rate of teacher attrition among the existing workforce, smaller class sizes would also necessitate the hiring of numerous new teachers. Since new teachers have the highest rates of attrition, this change in the composition of the teacher population would have an unpredictable effect on the overall rate of teacher attrition. This policy is low in cost-effectiveness because of its very high cost and uncertain effectiveness.

Equity. This policy does not promote equity in the distribution of teachers across student populations. Research on California's class



size reduction program suggests that class size reduction may actually increase inequity because of a dramatic increase in the percentage of unqualified teachers, who were concentrated in high-minority, high-poverty schools.⁶ By treating all teachers equally, this policy also fails to compensate for the different opportunity costs and working conditions that teachers face.

Administrative feasibility. Class size reduction is the most difficult of the four alternative policies to implement. In addition to recruiting and hiring new teachers, this policy would necessitate the complicated tasks of financing capital facilities to create additional classrooms.

Mentoring

Efficiency. The RAND literature review included two studies that found that beginning teachers who experienced induction and mentoring support had lower attrition rates. In addition, a 2004 review of empirical studies on induction programs identified ten high-quality studies on mentoring, and all provided "some empirical support" for the claim that teacher mentoring programs for new teachers have a positive impact on teacher retention.⁷ Recent studies of induction programs in California and Chicago also suggest that mentoring results in a decline in teacher turnover and attrition.⁸

Researchers emphasize, however, that while a large body of research provides general support for the use of mentor teachers, mentoring and induction programs vary widely in purpose, length, intensity, structure, the selection of mentors, the types of teachers they serve, the training provided to mentors, cost, and also effectiveness. The Alliance for Excellent Education asserts that "research demonstrates that comprehensive induction cuts attrition rates in half." The group defines "comprehensive induction" as a combination of high-quality mentoring, common planning time, ongoing professional development, an external network of teachers, and standards-based evaluation.⁹

Enhanced funding to enable the implementation of comprehensive induction programs throughout the state based on national research could significantly impact the retention rate of new teachers. Because both national and Utah-specific research suggests that mentoring programs are effective in reducing attrition, and because of the relatively low cost of mentoring programs (compared to other reforms), enhanced induction programs hold the potential for high cost-effectiveness.

Equity. If mentoring resources were to some degree targeted toward schools with disadvantaged populations, this policy could promote equity with respect to both students and teachers, by acknowledging differences in working conditions. This could be accomplished by

providing additional funding to low-performing schools so that new teachers would enjoy a lower mentor-to-new-teacher ratio (e.g., 2-to-1 instead of 5-to-1 in regular schools). Either way (whether targeted or not), mentoring programs do not significantly disrupt the current system and are likely to be perceived as fair by all teachers.

Administrative Feasibility. Although a mentoring program is already in place (suggesting that implementation will be relatively easy), the success of mentoring in decreasing teacher attrition rates depends largely on the discretion of school officials, as well as the existence of a pool of competent, willing and motivated teachers who can serve as mentor teachers.

COMPARISON OF ALTERNATIVES

Based upon our analysis, we place the four policies examined in the following order of desirability:

- 1. Mentoring programs rate most favorably, with high ratings for efficiency and all equity measures, and a moderate rating for administrative feasibility.
- 2. Providing differentiated salaries based on working conditions and skills also rated favorably, with moderate efficiency, more equitable distribution of teachers among student populations, increased equity for teachers based on working conditions and opportunity costs, and moderate administrative feasibility.
- 3. Higher salaries for all teachers scored fairly well, with moderate efficiency and high feasibility, but it was not as positive as differential pay in the equity ratings.
- 4. Reducing class sizes did not score well, with low efficiency, generally less equity for students and teachers, and low administrative feasibility.

Criteria	Impact Categories	Policy Alternatives			
		Higher Salaries	Differentiated Salaries	Smaller Class Sizes	Mentoring
Efficiency	Cost-effectiveness in reducing teacher attrition	Moderate	Moderate	Low	High
Equity	Increased equity in distribution of teachers across student populations	No change	More equitable	Less equitable	More equitable, if targeted
	Treats teachers "fairly" according to the current system	Yes	No	Yes	Yes
	Compensates teachers differently according to working conditions and opportunity costs	No	Yes	No	Yes, if targeted
Administrative Feasibility	Ease of implementation	High	Moderate	Low	Moderate

Figure 4: Utah Foundation Ratings of Policy Alternatives

Note: Darkest shade of blue indicates the most favorable rating for the given criterion.

In conclusion, a well-rounded package of policies designed to provide support and training to new teachers and reforming teacher compensation in ways that respond to the labor market would be most likely to reduce teacher attrition in the most cost-effective manner. These policy changes should be accompanied by well-designed and adequately funded data collection activities to ensure that reforms are producing the intended outcomes and to provide evidence for adjusting the reforms to ensure their success.

ENDNOTES

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