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Teacher Attrition: Differences in Stakeholder Perceptions of Teacher Work Conditions

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Abstract: The purpose of this study was to identify differences in perceptions between three stakeholder groups—principals, K-12 teachers, and parents—regarding the effect of workplace conditions on teacher attrition. All three groups agreed that workplace conditions are important, but they disagreed about (a) which workplace conditions are most problematic for teachers, (b) the magnitude of these problems, and (c) the degree to which these problems may contribute to teachers leaving. The greatest disagreements occurred in perceptions of (a) teachers' involvement in decision-making, (b) protection of teacher preparation time, (c) administration's management of student discipline, (d) adequacy of resource availability, (e) the degree to which a trusting and supportive school environment existed within the school, and (f) whether teachers' expectations were reasonable. Overall, principals believed that work conditions are relatively good for teachers, while many teachers disagreed with these perceptions.

Keywords: teacher attrition; educational issues; work conditions for teachers

1. Introduction

Many factors affect the quality of education, including school culture, community demographics, the support systems available to teachers and students, and many others [1]. One of the most important factors identified as a key challenge to the delivery of quality education, and which has steadily increased in recent years, is teacher attrition. While it is impossible to know the exact numbers, some researchers estimate that up to 16% of public school teachers may leave their schools every year, some of whom move to a different school, but many of whom leave the profession entirely [2]. Compounding this problem is the fact that student enrollments are up, while new entrants into the teaching profession are down [3].

Since it is costly for schools to lose skilled teachers, it is important for school administrators to understand the factors driving the teacher attrition problem [4,5]. Teachers likely consider many factors in their decision to leave the profession, but recent research has determined that workplace conditions are paramount [6]. Prior research has found differences in perceptions between administration and teacher on issues associated with workplace conditions [7,8]. However, as it is important to replicate research, especially when perceptions change as do workplace conditions, this research looks at current perceptions of various stakeholders, paying attention to differences in these perceptions.

Using the findings from previous teacher attrition research as a starting point, the purpose of this study was to identify the differences between teachers', administrators', and parents' perceptions of working conditions for teachers. It is hoped that this study will help school administrators better understand the issues that lead to teacher attrition, in order to help administrators take actions that might better incentivize teachers to stay in the profession.

2. Summary of Teacher Attrition Research

Some amount of teacher attrition in the profession is unavoidable, because of personal factors and life issues. In fact, a certain amount of turnover is even healthy [9]. However, the current dynamic goes far beyond what might be considered “normal” levels of attrition [3,5]. High levels of teacher turnover are harmful for schools and students [9]. Aside from the negative impact on efforts to build strong organizational cultures and maintain staff cohesion [10,11], high levels of teacher turnover often negatively impact student achievement outcomes due to inconsistency in instruction and differences in teacher quality and effectiveness between teachers who leave and those who replace them [12]. Additionally, replacing teachers is very expensive. Carrol [13] posits that replacing an individual teacher in the United States costs between \$4,400 and \$17,900, with state expenditures for teacher turnover in the U.S. estimated to be over \$1 billion each year [14].

Over the past four decades, much educational research has been devoted to this problem, with the hope that educators and policymakers will be able to develop effective, practical solutions. With drastic decreases in enrollment for teacher education university programs [3], the previous solution often adopted by policymakers of recruiting more teachers to replace the ones that leave is no longer a viable solution. Even with a wide range of initiatives to recruit new teachers, this continues to be a problem [15,16]. Solutions that have been attempted include (a) career-change programs designed to entice professionals into midcareer switches to teaching; (b) alternative certification programs to allow college graduates to postpone formal education training and begin teaching immediately; (c) recruitment of teaching candidates from other countries; and (d) financial incentives such as signing bonuses, student loan forgiveness, housing assistance, and tuition reimbursement [15,16]. While perhaps providing some limited benefits, these efforts have failed to adequately compensate for the flood of teachers leaving the profession and in some cases have only served to contribute to the attrition problem in other ways. For example, some researchers have found that alternatively trained teachers are often less effective than formally trained teachers and may leave their teaching positions at even higher rates [17]. Perhaps, the main problem with these efforts is that none of them address the root cause of what is determining the teacher attrition problem in the first place; therefore, we should perhaps not be surprised that they have not led to a permanent solution. Much of the teacher attrition research has, therefore, been focused on attempting to understand the cause of the attrition problem, so that proposed solutions will be more likely to be successful than simply replacing the teachers who leave.

Some of these studies have concluded that interpersonal principal–teacher relationships are a primary driver of variations in teachers’ satisfaction and commitment levels [18] and have proposed efforts (e.g., retreats, teambuilding, culture building, administrator training, modeling, etc.) to strengthen those relationships as a possible solution to the teacher attrition problem. However, while there is evidence that some administrators have employed such efforts with some success in their schools, such successes have not made a dent in teacher attrition levels on a large scale [19].

Low salaries for teachers is another factor that educational research has frequently identified as a major cause of the teacher attrition problem; however, research has shown that raising salaries has not been particularly effective at reducing attrition [20,21]. This suggests that increasing teacher pay may be only a partial solution to the attrition problem.

Increased expectations of teachers, as well as decreased support and respect for the teaching profession, are other concerns that have been noted in the research literature [22–24]. However, practical solutions to these concerns have not been forthcoming. In short, while researchers have proposed a variety of explanations for attrition, and educators and policymakers have implemented a variety of policies based on those explanations to attempt to solve the attrition problem, efforts, to this point, have not succeeded in stemming the rising tide of teacher attrition [1].

It has been suggested by some researchers that one of the reasons we have so far been unsuccessful at solving the attrition problem is that we do not yet sufficiently understand. Teacher attrition is a wicked issue that is recognized by everybody but which nobody has yet been able to pin down, because it

comprises the convergence of multiple practical and theoretical educational themes [25]. The authors tend to agree and have designed the current study to explore some of those practical educational themes—specifically, those related to teacher work conditions—in order to better understand the role they play in teacher attrition (it would be impossible to conduct an in-depth investigation of all the relevant educational themes in a single study). Factors related to teachers' working conditions that have been identified in previous research as affecting teacher attrition are presented in Table 1. These factors were used to develop items for the data collection instruments employed in this study.

Table 1. General factors included in this analysis that are believed to influence teacher attrition.

Factor	Source
Teacher expectations	[26,27]
Personal factors/life issues	[4]
Student behavior	[28]
Work conditions/job satisfaction	[1,2]
School leadership	[1,27,29]
Teaching experience	[17,30]
Environment of trust	[31]
Professional development	[1,32]
Respect/support	[33,34]
Compensation	[1,35]

Note: Multiple sources exist for each general factor. In addition, each factor has various aspects associated with it.

3. Methodology

In this study, a sample of parents, practicing principals and assistant principals, and K-12 teachers in several school districts across one western U.S. state were surveyed to determine their perceptions of working conditions for teachers, based on factors that are already believed to affect teacher attrition (see Table 1).

3.1. Participants

After IRB approval was granted for the study, participant recruitment took place in the early months of 2018. Participants were recruited by approaching all the school districts in the state with an email that (a) explained the purpose of the research, (b) provided an attachment of IRB approval and of the sample surveys, and (c) invited the school district to participate in the study. Once a district agreed to participate, the surveys were sent to district office personnel to be distributed through the district email system. Participating districts then sent email invitations containing a survey link to parents, current teachers, and principals and assistant principals. Since perceptions can differ by location [4,5], efforts were made to ensure that the final sample included school districts representing urban, suburban, and rural areas, as well as school districts representing a geographic cross section of the state in which the study took place.

The researchers were successful in receiving approval from 15 (approximately 36%) of the 41 school districts that were invited to participate. The smallest of these districts employed 72 teachers, the largest employed 2245. Participation was anonymous and voluntary. The various explanations that district superintendents gave for why they chose to not participate in the study included concerns with (a) principals and teachers having already reached survey fatigue for the year; (b) the survey's temporal proximity to the most recent survey sent out by the district; (c) the amount of time remaining in the school year; (d) potential parent backlash; (e) political concerns; and (f) lack of interest on the part of district personnel. Within the 15 participating districts, all school administrators and teachers were emailed an online survey link. Nine of the districts also sent out survey invitations to parents. These sampling efforts yielded the following results: 495 parents completed all survey items; 2003 current teachers completed all survey items (183 teachers only completed part of the survey); and 93 school administrators completed all survey items (2 administrators only completed part of the

survey). An examination of the incomplete surveys revealed that they often contained meager data and that the survey items that were not answered appeared to be randomly distributed throughout the survey. Therefore, the researchers decided that list-wise deletion was a justifiable approach to take to the missing data, and only surveys with complete data were included in the data analysis.

Within the participating school districts, the teacher survey response rate was estimated at approximately 34%, with 1533 (77%) of the respondents being female. Within the group of responding school administrators, a response rate of approximately 47% was estimated, of whom 46% (43 respondents) were males. The response rate for parents was impossible to calculate, but 383 parent respondents (77%) were female.

3.2. Instrument Development

Survey items were developed, tested, and refined in order to capture respondents' perceptions of specific teacher working conditions. The instruments used for data collection were validated through a process recommended by Creswell [36]. Based on a review of the literature that identified potentially important factors that might affect an individual's decision to choose teaching as a career, draft items were created. These items were tested and revised on the basis of a cognitive think-aloud process followed by pilot testing to verify that the items did in fact capture the essence of the factors of interest. Once the items were set, they were entered into an online survey software program to be distributed by cooperating school districts. In the spring of 2018, invitations to complete an anonymous online questionnaire were sent to all the juniors and seniors in the nine participating school districts by district personnel, using their email system. For disaggregation purposes, the typically 6-point Likert scale was collapsed to three categories for reporting the results in this paper, although the full scale was used for the analysis. The final version of the survey was approved by each of the school districts.

3.3. Data Collection and Analysis

The question this study attempted to address is: What are the differences in perceptions of teachers' working conditions between (a) teachers, (b) school administrators, and (c) parents (with an emphasis on differences between how these three stakeholder groups believe teacher working conditions affect teacher attrition)? Responses were obtained using a 6-point Likert-type scale with response options that ranged from *strongly disagree* to *strongly agree*. For the purpose of simplicity in reporting results, the scale was later collapsed into three categories (e.g., the *agree* and *strongly agree* response options became a single category, reported here as *agreed with statement*). After determining that the assumptions for the statistical methods used in the study (linearity, independence, normality, equality of variance, and multicollinearity) were met, the response percentages for each category were then compared for each of the disparate stakeholder groups that participated in the study (teachers, administrators, parents). Parametric and non-parametric statistics were then used to determine whether the differences in the response distributions were statistically significant. The primary analysis in this paper was meant to identify factors highly predictive of teachers thinking of leaving the profession, shown in Table 3. A complete explanation of this regression analysis is reported in a separate paper currently in press.

4. Results and Discussion

Of the responses collected for the 13 specific working conditions examined in this study, the results revealed substantial disagreements between the various stakeholder groups (teachers, administrators, and parents) (see Tables 2 and 3). In general, the stakeholder groups all agreed that workplace conditions are important and that many of them likely play a role in teacher attrition. However, there was significant disagreement between the stakeholder groups regarding (a) which workplace conditions are most problematic for teachers, (b) the magnitude of the problems caused by these conditions, and (c) the role these problems play in teachers leaving their teaching position. The reader should note that parents were not asked about some of the workplace conditions, due to the researchers'

determination that they likely would not have enough information to develop an informed opinion about them (see Table 2). Likewise, in Table 3, teacher beliefs are compared to administration’s and parents’ perceptions on related topics.

4.1. Administrative Support

The research literature on teacher attrition places special significance on administrative support in teachers’ decisions about remaining at their teaching post. Hughes et al. [31] found that teachers held four areas of support in greatest esteem. The most important kind of support was emotional support, meaning that expectations of teachers are reasonable and that there is a trusting and supportive environment in the school. The second most important kind of support was environmental support, meaning that administrators effectively address student behavior and safety issues. The third most important kind of support was instructional support, meaning that teachers are provided with adequate resources, have a say in decisions that affect them, and are provided with quality professional development opportunities. The final kind of support that was most important to teachers was technical support.

Table 2. Differences in perceptions of working conditions for teachers.

Working Condition in Schools	Agreed with Statement *			Importance **
	Principals	Teachers	Parents	Teachers
There is a trusting and supportive environment †	92%	53%		89%
Expectations of teachers are reasonable †	56%	20%	10%	91%
Students are well behaved and care about learning †	49%	19%	6%	78%
Adequate resources provided	83%	43%	7%	80%
Teachers respected in community	50%	30%	57%	76%
Leaders articulate a vision for improving learning †	83%	51%		62%
Teacher performance is evaluated fairly	78%	47%		76%
Teachers have a say in decisions that affect them	89%	39%		84%
Quality professional development opportunities †	79%	54%		68%
Support provided to improve	83%	51%		62%
Administrators effectively address student behavior and safety issues	86%	44%		84%
Preparation time is protected	85%	38%		81%
Teachers are compensated adequately for their work †	27%	7%	5%	86%

* percentage of individuals in the group who agreed or strongly agreed with each statement; ** percentage of individual teachers who felt this factor was important or very important; † factors found to be highly predictive of teachers thinking of leaving the profession [6].

Table 3. Differences in beliefs regarding common reasons for teachers leaving the profession.

Potential Reason for Leaving	Agreed This Is Common *			Teacher Beliefs
	Principals	Parents		
Work expectations become overwhelming	54%	63%	80%	Expectations of teachers are unreasonable. †
Not respected by students	47%	50%	19%	Students are well behaved and care about learning. †
Not respected by community	30%	36%	30%	Teachers respected in community
Not respected by administration	16%	24%	53%	There is a trusting and supportive environment †
Better paying job	45%	62%	30%	I could get a better paying job
Negative work environment	39%	9%	40%	Work environment is negative
Compensation inadequate	30%	36%	93%	Teachers are not compensated adequately †
Lifestyle changes	70%	55%	22%	Does not fit my lifestyle
Dislike current position	9%	10%	25%	Dislike current position

* percentage of individuals in the group who agreed or strongly agreed with each statement; † factors found to be highly predictive of teachers thinking of leaving the profession [6].

The results of the present study corroborate the findings of Hughes et al. [31] to a significant degree but also reveal sharp disagreement between the beliefs of the participating teachers and those of their administrators about the nature of the working relationships that exist within their schools.

4.1.1. Trusting and Supportive Environment in Schools

Only half (53%) of the teachers in this study agreed with the general statement that *there is a trusting and supportive environment* at their school, while nearly all (92%) principals believed that such an environment existed (see Table 2). A more specific example of this disparity in perception of support is the fact that the teachers in this study did not believe that *teachers have a say in decisions that affect them*, which research suggests is one of the specific indicators of a trusting environment in schools [32]. Only 39% of teachers agreed with this statement, in contrast to 89% of principals.

4.1.2. Expectations of Teachers

Teaching has always been difficult, and expectations of teachers have steadily increased over the years [26]. Only 20% of teachers in this study felt that expectations of teachers are reasonable, and 91% considered this particular working condition to be important or very important (see Table 2). Interestingly, an even lower percentage of parents (10%) believed that expectations of teachers are reasonable. In fact, this working condition has been found to be a highly predictive factor in teachers' satisfaction with their current position, which has recently been found by the authors (in a related study) to be a highly predictive factor in teachers' thoughts of leaving the profession [6]. The results of this survey indicate that some school leaders do recognize this problem, as only about half of them (56%) believed that the expectations placed on teachers were reasonable. However, these results confirm that there still exists a significant disparity in perceptions of this issue between teachers and administrators. This is confirmed even more strongly by the examination of an even more specific indicator of expectations placed on teachers—the factor *teacher preparation time is protected*. Most of the administrators (85%) agreed with the statement, as compared with only 38% of teachers who agreed.

4.1.3. Student Behavior

Both teachers and parents reported that many students are not particularly well behaved in school and that many are also not invested in their own learning. The results of this study showed that 19% of teachers and only 6% of parents agreed that students are well behaved and care about learning (see Table 2). These findings seem to corroborate Ravitch's [16] report of a growing toxicity in the public school environment, including the dynamic between students and teachers. Most importantly, this working condition has recently been found to be a highly predictive factor in teachers' satisfaction with their current position, which has been found to be a highly predictive factor in teachers' thoughts of leaving the profession [6]. Again, administrators were far more likely than teachers to believe that student behavior is not an issue (49%). Compounding this problem is the fact that teachers expect school leadership to support and enforce rules for student conduct; however, most administrators (86%) indicate that they effectively address student behavior and safety issues, while only 44% of teachers believe that they do.

4.1.4. Resources and Opportunities

The two working conditions (a) having *adequate resources provided* to teach effectively and (b) receiving *quality professional development opportunities* were believed to be important by both principals and teachers. However, administrators and teachers tended to have different opinions regarding the adequacy of these conditions in schools. For the first of these two factors, 83% of principals (but only 43% of teachers) agreed that teachers received adequate resources to do their jobs (see Table 2). (Interestingly, only 7% of parents agreed that teachers received adequate resources to do their jobs). Regarding the second factor, 68% of the teachers in this study rated it as important, but only about half (54%) agreed they were receiving quality professional development opportunities. Meanwhile, 79% of

principals believed teachers received such opportunities. This discrepancy in stakeholders' perceptions of this particular working condition has especial significance. It has been recently identified by the authors (in a related study) to be a highly predictive factor in teachers' satisfaction with their current position, which has been found to be a highly predictive factor in teachers' thoughts of leaving the profession [6].

4.2. Compensation

One factor on which respondents were in general agreement is that teachers are not paid well (only 27% of administrators, 7% of teachers, and 5% of parents agreed with the statement *teachers are compensated adequately for their work*), although there is still a 20% disparity between teachers and administrators on this work condition (see Table 2). However, compensation, on its own, does not seem to be the main cause of teachers deciding to leave. While it is true that some research [1,6,35] has suggested that low teacher salaries is a leading cause of teacher attrition have found that the frequency of teachers' thoughts of leaving the profession appears to be influenced more by their working conditions than by pay alone. According to that study, work conditions that influence thoughts of leaving include (a) unreasonable expectations, (b) lack of trust and support from administrators, (c) teachers' inability to participate in decisions affecting their job, and (d) student behavior. This does not mean that teacher compensation is not an influential factor in teachers' thoughts and decisions about leaving or staying. Regardless of how long they had been teaching, 93% of teachers agreed that they are not paid adequately, but salary was not reported as being the most important factor teachers considered when making a decision to remain a teacher. In terms of importance to teachers, compensation was reported by teachers as being less important than (a) reasonable work expectations and (b) a trusting and supportive environment at school. These data suggest that working conditions may often be more important to teachers than compensation, or at least that compensation and work conditions may work together to influence teachers' thoughts of leaving the profession.

For example, teachers might initially agree that their compensation is not adequate, but, because their work expectations are reasonable and they have a trusting and supportive environment at school, they may still have no thoughts of leaving their post. However, as time goes on, if a teacher begins to perceive that work expectations have become less reasonable and/or that the school environment is no longer as trusting and supportive as it once was, then the inadequate compensation might begin to be more important. If this hypothetical scenario, or something like it, is true for many teachers, it may explain (or partially explain) why research on teacher attrition consistently finds that teachers are dissatisfied with their pay, but that efforts to increase teacher salaries have had no appreciable success at stemming the tide of current teacher attrition rates [20,21].

4.3. Differences in Perspective

The study results from Table 3 show significant differences in perceptions between principals, parents, and teachers regarding common reasons for teachers leaving the profession. First, while 70% of principals and 55% of parents believe teachers leave for lifestyle reasons, only 22% of teachers indicated that this is the case. Second, the study results show that while only 9% of principals and 10% of parents agree that teachers dislike their current position, 25% of teachers indicated they do not like their current teaching position. This is particularly important, as it is one of the factors that has been found to be highly predictive of teachers' thoughts of leaving [6]. Third, many principals (47%) and parents (50%) believe that teachers leave because they do not feel respected by students, but those beliefs are out of step with the beliefs of teachers, only 19% of whom agreed that teachers leave because of a lack of respect on the part of the students. Fourth, regarding compensation, only 30% of principals and 36% of parents believe teachers leave due to inadequate compensation, while 93% of teachers agreed that this was a common reason for teachers leaving. Fifth, over half of the teachers surveyed in this study (53%) believed that teachers leave because of issues related to trust and support in their school. In contrast, only 16% of administrators and 24% of parents considered this a common reason

teachers leave. This was found to be a highly predictive factors for teachers thinking of leaving the profession [6]. Finally, the most highly predictive factor for teachers thinking of leaving, according to our findings [6] is that work expectations become overwhelming. With regard to this factor, there were major discrepancies in stakeholder perceptions, with 54% of principals and 63% of parents agreeing that this is a common reason for teachers leaving, compared with 80% of teachers.

These results confirm that there exist important discrepancies in the beliefs of the various stakeholders regarding the issue of teacher attrition. Additionally, these results serve to underscore the fact that there are many factors (e.g., teacher work conditions) beyond teacher salaries that play a major role in the complex decision that teachers make to either remain in or leave their teaching position. Additionally, these factors appear to work together in complex ways that are not always immediately apparent, thus indicating the importance of educators and policymakers employing a multi-pronged approach to solving the attrition problem.

An important point made by several administrators in the Comments section of the survey notes that teachers are occasionally forced to leave the profession because they do not meet adequate levels of acceptable performance. The observation about teacher dismissals is, of course, correct, and points out the fact that a certain amount of teacher turnover is unavoidable and, if due to teacher incompetence or malfeasance, is even desirable [9]. Indeed, one of the most important roles of a principal is to identify and remove underperforming teachers [1]. Studies have shown that teachers generally agree to be held to high professional standards for delivering instruction; however, they also want the procedures for teacher performance evaluations to be consistent and they want to receive feedback that can help them improve their teaching [1]. Unfortunately, only 47% of teachers in this study agreed that their performance is evaluated fairly, as compared with 78% of principals (see Table 2).

5. Conclusions

Public school districts in the United States struggle with teacher retention [27,37,38]. Policymakers have often responded to this problem by trying to increase the supply of teachers, by offering incentives, or both. While such recruitment efforts may be worthwhile and helpful to a point, little evidence exists that these effort will solve the teacher attrition problems without simultaneous efforts to address other factors associated with teachers' decision to leave, such as the conditions under which teacher work [6,39].

The purpose of this study was to identify differences between teachers', administrators', and parents' perceptions of working conditions for teachers, especially with regard to which of those working conditions are important to teachers. In general, teachers in this study feel expectations are unreasonable, there is a lack of trust and support in the school environment, and their pay is inadequate. On the other hand, principals seem to believe they involve teachers in the decision-making process at their school, they protect teachers' preparation time, they address student behavior problems adequately, and they provide teachers with opportunities for professional development. Given the disconnect that seems to exist between teachers' and principals' perceptions of teacher working conditions, even with improved pay, teachers will continue to consider leaving the profession.

This being the case, it is important for administrators to consider what policies and practices can be implemented to incentivize teachers to stay. While the principals in this study had an average of over 12 years in prior teaching experience, they had been working as full-time administrators an average of 9 years. Regardless of the long tenure as a teacher for most of these administrators, with all of the additional concerns, responsibilities, and demands that come with the position of administrator, it seems clear that administrators' perceptions of the teaching environment become divergent from the beliefs of those still teaching. The principals in this study expressed what appears to be great optimism about the nature of the workplace conditions in their schools; however, this is at odds with the much more negative perceptions of their teachers.

School administrators have the responsibility to understand teachers' concerns and play a key role in improving the school environment for teachers, regardless of the accuracy of teachers' perceptions [1].

There is, of course, an important role for teachers to improve the work environments at their schools. However, the purpose of this particular study was to identify the disparity in perceptions held by administrators and teachers regarding the work conditions at their schools.

The eight factors that showed the largest gaps in agreement between principals often deal more with work condition than with pay. These include the belief that (a) teachers have a say in decisions that affect them; (b) teacher preparation time is protected; (c) students are well behaved and care about learning; (d) administrators effectively address student behavior and safety issues; (e) adequate resources are provided; (f) a trusting and supportive environment exists; (g) expectations of teachers are reasonable; and (h) compensation is reasonable. These results suggest that, in addition to efforts to improve teacher pay, any comprehensive plan intended to reduce teacher attrition must primarily be concerned with improving work conditions in schools. Recruiting large numbers of new teachers to replace those who leave has worked in the past to alleviate the teacher attrition problem. However, even if more teachers are hired, these teachers will continue to leave if work conditions are not improved. Unfortunately, when making career choices, those considering a teaching career do not often consider the work conditions [6]. This is likely one of the reasons individuals end up leaving their teaching positions once the reality of teachers' work conditions become more apparent. As the common expression goes, "a rising tide lifts all boats." Improved teachers' work conditions is clearly an important factor that needs to be address if the teacher attrition problem in the U.S. is to be solved. This starts with recognizing the disparity between perceptions about work conditions for teachers among important stakeholders.

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