Performance Accountability and the Community College: Using Institutional Performance to Determine Faculty Salaries

Douglas A. Smith, Ph.D.
Assistant Professor
Department of Educational Leadership & Policies
Wardlaw College
University of South Carolina
Columbia, SC

Henry Tran, MPA, PHR, Ph.D.
Assistant Professor
Department of Educational Leadership & Policies
Wardlaw College
University of South Carolina
Columbia, SC

ABSTRACT

Performance accountability systems are increasingly utilized by state legislatures to hold community colleges more accountable for student outcomes and responsible spending through the linking of state funding to specific outputs. Through these actions, it is reasonable expect an emphasis on institutional performance to permeate into a community colleges' operations, decisions, and spending. Specifically, full-time faculty salaries are the largest and most significant expenditure. Salaries are determined by the selection of a labor market whereby employers compete for employees through competitive compensation. The purpose of this paper is to explore the feasibility of determining full-time community college faculty salaries using a performance based labor market. A multivariate analysis of variance (MANOVA) was conducted to compare beginning and average faculty salaries as determined from both the performance based labor market and the actual negotiated labor market used by community college districts. The findings of our research are discussed as they relate to employees and employers and the principles of distributive and procedural justice within a performance accountability framework.

INTRODUCTION

In recent years, academic quality concerns and coinciding fiscal pressures have resulted in increased public scrutiny for community colleges to improve their efficiency of public funds usage (Dowd & Taing Shieh, 2013). Put another way, community colleges face growing calls to be accountable. Accountability is a term increasingly used in the vocabulary of community college administrators, policy makers, and the general public to describe this phenomenon. While there are many forms of accountability, accountability for student outcomes and accountability for responsible spending are two major areas that community colleges are increasingly being publicly evaluated on.

Performance accountability systems are one mechanism state legislatures are increasingly adopting to hold community colleges more accountable for student outcomes and responsible spending. States that have adopted performance accountability systems utilize two main forms; performance funding and performance budgeting.

Specifically, *performance funding* "ties specific state funding directly and tightly to campus performance on individual indicators" (Burke, 2005, p. 219). These indicators include performance metrics such as rates for certification obtainment, graduation, and transfer to a four-year university. Performance funding moves state funding beyond traditional considerations that do not consider outcomes, such as student enrollment, current funding, and inflation. It creates a direct, automatic, and formulaic link between performance and funding through the distribution of funds using defined institutional outcome measures (Burke, 2005).

Similarly, *performance budgeting* "allows governors, legislators, and higher education boards to consider campus achievement on performance indicators as one factor in determining allocations for public colleges and universities" (Burke, 2005, p. 219). Performance budgeting is focused on decision makers' consideration of organizational outcome measures during the budget development phase. The performance budgeting strategy creates opportunities for decision makers, at their discretion, to budget additional funding based on accomplishment or progress towards prioritized outcomes.

As more state legislatures adopt performance accountability systems to allocate funds to higher education institutions, it is reasonable to assume that community colleges may seek to respond in a way that incorporates performance in their policies, procedures, and operations. In particular, community colleges may wish to consider how performance could be incorporated into budgetary decisions to closer align their institution with the growing external performance accountability pressures.

Of the multitude of community college expenditures, instructional faculty costs represent the largest and most significant expense (Cohen, Brawer, & Kisker, 2014) and the primary source of instructional faculty costs is salaries. Performance accountability has become a dominating force in community college discussions at the state funding level. However, neglected from the conversation is mention of performance accountability's ability to incorporate performance into the individual community college accountability network (Harbour, Davies, & Gonzales-Walker, 2010) and specifically the largest and most significant expenditure–faculty salaries.

The purpose of this paper is to explore the feasibility of determining full-time community college faculty salaries using a performance based labor market. Through this, we expand the discussion of performance accountability to a broader scope to consider its potential to influence institution level decision makers and processes. To inform our discussion, we first provide a brief literature review establishing the principles of distributive justice and procedural justice as a framework to better understand community college faculty salaries and the labor markets used to determine them. Second, considering what is known about labor markets used to determine faculty salaries, we compare an empirically defined relevant labor market based on performance to the negotiated labor market that is actually used in the field setting. Lastly, we provide a discussion and implications of our findings for community college employees' and employers.

FRAMEWORK

Researchers applying social justice theories (Young, Delli, Miller-Smith, & Alhadeff, 2004) and organizational justice theories (Hartman, Yrle, & Galle, 1999) to compensation issues address principles of distributive justice and procedural justice within their frameworks. Accordingly, we apply the concepts of procedural justice and distributive justice within a performance accountability framework as they relate to compensation.

Discussions of compensation traditionally focus on the issue of outcome fairness, or what is known as distributive justice (Scarpello & Jones, 1996). Procedural justice, on the other hand, is focused on the fairness of the process resulting in the outcome, including the decisions made along the way (Hartman et al., 1999). According to Hartman et al. (1999) "distributive justice appears to have more influence on satisfaction with the outcomes, while procedural justice appears more related to attitudes about the relevant institution or authorities" (p. 337). In sum, distributive justice is concerned with outcome fairness and procedural justice is concerned with process fairness.

Scarpello and Jones (1996) established that "just outcomes matter because they minimize the risks of decreased output" and "just compensation procedures matter because they are the mechanisms for aligning the interests of agents [faculty] with those of the principal [community college]" (p. 296). Further, they established that "fairness of compensation procedures determines the fairness of the resulting compensation and motivates the agents' [faculty] actions toward the output [performance] desired by the principal [community college]" (p. 296). Put another way, a fair process to determine faculty salaries leads to the perception of fair faculty salaries, which motivates faculty to improve their performance and ultimately institutional performance. Taking this one step further, we posit that a process to determine faculty salaries can be fair for all involved, and ideally result in fair outcomes through the selection of a performance based labor market–specifically, institutional performance.

NEGOTIATED LABOR MARKETS

Labor markets represent the terrain from where employers compete for employees through competitive recruitment and compensation. To enhance procedural justice within the compensation framework, community college districts select particular relevant labor markets to aide in the salary determination process. Young (2008) presents several different empirically defined labor markets, each based on a corresponding economic theory. For instance, districts can define relevant labor markets based on geographic area, size, wealth, and performance.

Districts that seek to pay like other districts based on geographic area seek to pay based on the economic principle of *supply and demand*. Within the community college context, the rationale here is that districts compete with their neighboring districts for the supply of community college faculty members and therefore the salaries they offer must be comparable with those offered by their geographic peers. Districts that seek to pay like other districts based on size seek to pay based on the economic principle of *economy of scale*. The rationale here is that differently sized community college districts may have differing level of staff support, teaching load and other job responsibilities, and this should reflect in their pay.

Districts that seek to pay like other districts based on wealth seek to pay based on the economic principle of *ability to pay*. The rationale is that districts of similar financial standing should pay relatively similarly because they have the ability to do so. Finally, districts that seek to pay like other districts based on performance seek to pay based on the economic principle of *cost-benefit*. The rationale here is that high performing districts should be rewarded for their accomplishments and there should be a link between inputs like salaries (i.e., cost) and outputs like student performance (i.e., benefit).

The impact of the selection of different relevant labor markets on salaries has been examined in education. In the K-12 public school setting, Tran and Young (2013) and Young et al. (2004) have found that average salaries for teachers differed depending on the selection of different empirically defined relevant labor markets, but did not do so for beginning salaries. Specifically they found that salaries determined by the relevant labor markets based on geographic area, size and performance differed from one another.

In the community college setting, Tran and Smith (2015) examined the impact of selecting the same empirically defined labor markets on faculty beginning and average salaries for all community college districts in California. They did not find any substantive differences in salary outcomes as established by the different labor markets (geographic area, size, wealth, and performance). Consequently, they note that the selection of any of the relevant labor market would result in similar pay outcomes and therefore recommend the consideration of determining faculty salaries by a relevant labor market based on performance to address the mounting pressures and criticisms related to performance and financial accountability. In sum, the authors found that it did not substantively matter which empirically defined relevant labor market was selected for the purposes of determining community college faculty salaries.

METHODS

In this paper, we seek to extend the work conducted by Tran and Smith (2015) by comparing salaries determined by the performance based labor market to those determined by a negotiated relevant labor markets for California community colleges in the 2011-12 academic year. Negotiated relevant labor markets are negotiated upon by the faculty union and the community college district, and are the comparative districts actually used in the field setting for the purposes of salary determination. The comparisons of salaries determined by performance based labor markets to a negotiated relevant labor market provides us with an idea of whether we are currently over or underpaying professors within the accountability context.

The performance based labor market was empirically defined as the three districts with the closest level of institutional performance. The level of performance was reflected by the Student Progress and Achievement Rate (SPAR), which is the percentage of first-time degree or transfer seeking students who completed any of the following within six years: Transferred to a four year college, earned an associate's degree (AA/AS); or earned a certificate (18 units or more); or achieved transfer status. California used SPAR as its official accountability reporting measure for community colleges in the 2011-12 academic school year.

The negotiated relevant labor market was operationalized as the actual community college districts used by community colleges to determine their faculty salaries. To obtain data for the negotiated labor market districts, we randomly sampled five target community college districts and contacted their human resources department to inquire which community college districts were actually used in the field for the purposes of salary determination. Although five may seem like a small number, a sample of five target districts generates a much larger number of comparative districts (n= 43), which is the subject of our analysis. Descriptive statistics for the salaries determined by performance and negotiated labor market are displayed in table 1. Judging by the close proximity of these values, these statistics foreshadow potential minimal pay disparities between selecting either of the two labor markets for purposes of pay establishment.

RESULTS

A multivariate analysis of variance (MANOVA) was conducted to compare beginning and average faculty salaries as determined from both the performance based labor market and the actual negotiated labor market used by community college districts. We used the negotiated labor market information collected from the randomly

Table 1
Descriptive Statistics

	Performance Labor Market		Negotiated Labor Market	
	Mean	Standard Deviation	Mean	Standard Deviation
Beginning Salary	$50,447.21	$7,229.47	$50,313.77	$7,626.87
Average Salary	$88,090.80	$7,915.61	$88,260.33	$9,867.16

sampled community college districts and compared that to the information generated from the empirically defined performance based labor market for those same five community college districts. The MANOVA results showed an insignificant multivariate effect, Wilk's lambda $F(6, 1718) = .67$, $p = .68$, which suggests that results do not support the hypothesis that the two labor markets differed statistically from one another for either beginning or average faculty salaries.

If salaries based on a negotiated relevant labor markets exceed those based on the performance relevant labor market, then this may suggest inefficiency in expenditures from an accountability perspective (Dowd & Taing Shieh, 2013). For instance, if professor salaries determined by the negotiated relevant labor market earn higher salaries than faculty paid based on a performance labor market, then professors are being overpaid from a performance accountability perspective. If salaries based on the negotiated relevant labor markets fall short of those determined by the performance relevant labor market, then community college professors may be underpaid relative to their contributions towards district outcomes. Either finding is important in a time where financial resources for education are slim and justifications for expenditures are required. The results of this study suggest that neither occurrences are reflected in the current state of affairs and that faculty salaries are comparable irrespective of the selection of different relevant labor markets.

By selecting a performance based labor market for salary determination purposes, an explicit link between performance and pay is created. However, it is unknown whether performance and pay are presently related in the current environment. To explore this question, we examined the potential link between present faculty salaries and performance. Specifically, we conducted a multivariate regression analysis that regressed beginning and average faculty salaries offered by community college districts on their performance. Because we worked with population data (i.e., data from all 72 community college districts in the 2011-12 academic year), we did not have a need to rely on p-values or inferential statistics to interpret these findings, as any difference observed represent actual differences in the population. Results suggest that district performance does predict district base salaries, b =11,85.31 and average salaries, b=24,095.15. Figures 1 and 2 display scatter plots of district beginning and average salaries against district performance.

These figures suggest a moderate relationship between district pay and performance. However, this is far from strong evidence to suggest that faculty are paid more for higher student outcomes. Because this analysis represents only a snapshot in time, we are unable to determine whether performance causes salaries to rise, whether salaries cause performance to rise, or whether there is some unknown lurking factors that connect both. In addition, the relationship between performance and pay, although seemingly present, is not strong, especially for beginning salaries. These results echo concerns expressed by others (e.g. Horne, Foley, & Flora, 2014) that faculty pay might not be as strong a motivator to improve student performance, as some perceive them to be.

DISCUSSION AND IMPLICATIONS

Our findings suggest that community college faculty salaries based on an institutional performance labor market do not differ from the labor markets currently used by community colleges. These findings extend findings from prior studies (Tran & Smith, 2015) that suggested faculty salaries determined by empirically defined labor markets based on geographic area, size, and wealth did not differ from an empirically defined labor market based on institutional performance.

As it relates to distributive justice (i.e. the fairness of the outcome), minimal disparity in salary outcome when selecting a labor market based on performance compared to using any of the other labor markets suggests fairness in outcomes. From an employees' perspective, they are not financially harmed by the selection of a labor market based on institutional performance as compared to the status quo. If they were to be financially harmed they likely would not support the selection of this labor market. However, because our findings suggest that performance based salaries do not vary much from the status quo, this

Figure 1
Scatter plot of
District's Beginning Faculty Salaries on
District Performance

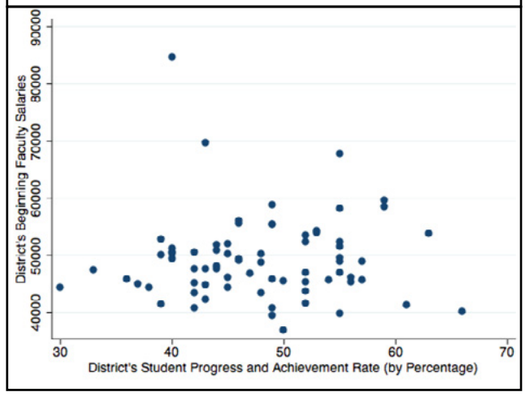
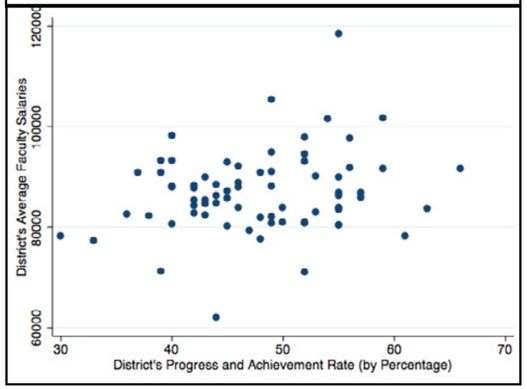


Figure 2
Scatter plot of
District's Average Faculty Salaries on
District Performance



may result in the potential of increased buy-in from faculty (or at least less opposition) for linking faculty salaries to institutional performance.

From the employer perspective, selecting a labor market that pays based on institutional performance provides an opportunity to address increasing calls to be accountable for student outcomes and spending. This allows community colleges an opportunity to respond to stakeholders and demonstrate a responsiveness to these accountability demands. By linking faculty salaries to institutional performance through the salary determination process, community colleges may garner more public support.

As it relates to procedural justice (i.e. the fairness of the process), the selection of a labor market based on empirical data supports and guides decision makers during the salary determination process. From an employees' perspective, a fair process to determine pay practices and policies promotes transparency. From an employers' perspective, a district can demonstrate rational decision-making based on empirical evidence.

Like all studies, our work is not without its limitations. We recognize that institutional performance can be measured a variety of ways that differ from the measurement used in our study. Our definition of institutional performance aligned with the states definition of performance. However, future research should look at alternative definitions of performance.

In addition, the main analysis conducted for this study was based on a smaller sample. One potential problem with this is that statistical procedures may not have been able to detect any existing disparities. However, we feel confident that this is not the case as examinations of the beginning and average salaries between labor market (as evident in table 1) suggests minimal differentiation. Also, there are only 72 community colleges in California. Because we only focus on California, results may also not be representative of community colleges across the nation. However, California is the state that operates with the most number of community colleges, which is a reason for its selection. Future studies should replicate this study in other states.

Furthermore, we recognize that paying the lowest salaries to the lowest performing community colleges may be counter productive. Specifically, some may argue that underperforming community colleges should be offering higher wages to attract faculty that can improve institutional performance. However, these types of arguments are based on the assumption that offering higher pay is a viable mechanism for attracting faculty candidates who have the ability to improve community college outcomes. Future studies should examine whether the selection of a performance based labor market may serve as an incentive for subsequent institutional performance improvement. Our initial examination of a potential link between present faculty salaries and performance suggest a moderate relationship between district pay and performance, however this simple examination was exploratory and cross-sectional in nature. Future studies should consider examining the association between performance and salaries across time.

Lastly, we recognize that some community college districts may use more than one labor market to determine faculty salaries. Future research should explore commu-

nity colleges using multiple labor markets to determine faculty salaries. Specifically, future research should look at the application of a performance based labor market as one of multiple labor markets informing salary determination decisions.

Over the next decade, community colleges will face increased pressure to be accountable for student performance and spending. Performance accountability systems have been one way in which community colleges have been encouraged by state legislatures to meet these demands. State funding linked to institutional performance is inherently a motivator for community colleges to focus on student outcomes and other state defined measures of performance. The next step for community colleges operating within performance accountability systems is integrating performance into local policies, procedures, and operations. Specifically, faculty salaries are one of the largest expenditures in a community college budget.

The findings of our research suggest that community colleges can integrate institutional performance into the faculty salary determination process by selecting institutional performance as a labor market. Our findings suggest that faculty salaries based on an institutional performance labor market do not differ from the negotiated markets currently in place. Accordingly, given the benefits, and lack of financial harm, to the employee and the employer from a distributive justice and procedural justice perspective, community colleges may wish to consider selecting institutional performance as a labor market in the faculty salary determination process.

REFERENCES

Burke, J. C. (2005). Reinventing accountability: From bureacratic rules to performance results. In J. C. Burke (Ed.) *Achieving accountability in higher education: Balancing public, academic, and market demands*. (p. 216-245). San Francisco, CA: Jossey-Bass.

Cohen, A. M., Brawer, F. B., & Kisker, C. B. (2013). *The American community college*. (6th Edition). San Francisco: Jossey Bass.

Dowd, A.C. & Taing Shieh, L. (2013). Community college financing: Equity, efficiency, and accountability. *NEA 2013 Almanac of higher Education*. National Education Association.

Harbour, C. P., Davies, T., & Gonzales-Walker, R. (2010). The community college accountability network: Understanding institutional accountability at Aspen Grove Community College. *Community College Review*, *37*(4), 348-370.

Hartman, S. J., Yrle, A. C., & Galle, W. J. (1999). Procedural and distributive justice: examining equity in a university setting. *Journal of Business Ethics*, *20*(4), 337-351.

Horne, J., Foley, V. P., & Flora, B. H. (2014). Race to the paycheck: Merit pay and theories of teacher motivation. *Journal of Academic Administration in Higher Education*. *10*(1), 35-39.

Scarpello, V. & Jones, F. (1996). Why justice matters in compensation decision making. *Journal of Organizational Behavior, 17*, 285-299.

Tran, H., & Smith, D.A. (2015). A Comparison of Relevant Labor Markets to Determine Full-Time Community College Faculty Salaries. Journal of School Public Relations, 36(2), 155- 175.

Tran, H. & Young, I. P. (2013). An efficiency assessment among empirically defined labor markets for determining pay for teachers. *Journal of School Public Relations*, *34*(2), 139-161.

Young, I.P. (2008). *The Human Resource Function in Education Administration. Ninth Edition*. Pearson Education, Inc. Upper Saddle River, New Jersey.

Young, I. P., Delli, D. A., Miller-Smith, K. A., & Alhadeff, A. B. (2004). An evaluation of the relative efficiency for various relevant labor markets: An empirical approach for establishing teacher salaries. *Educational Administration Quarterly*, *40*(3), 366-387.