

Contributing Factors to Secondary Administrator Job Satisfaction and Outcomes

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Abstract

The significance of the role of school administrator has been shown in recent years to be second only to the influence of the classroom teacher in terms of increasing student achievement and improving the climate and culture of a school. The purpose of this mixed-methods study was to determine how preparation, mentorship, feedback, and district infrastructure influence secondary administrator principal job satisfaction and outcomes. While the study focused on the assistant principal (AP), the findings and recommendations apply to principals and vice principals (VP) alike. Correlational analyses indicated that strong principal relationships, the presence of a formal evaluation, and having district support all significantly contributed to higher levels of AP job satisfaction.

Key Words

Principal, school administrator, assistant principal, vice principal, feedback, evaluation, mentorship, accountability

Effective school leadership has been shown to be one of the most important factors in improving student achievement, hiring and motivating excellent teachers, and creating a strong professional school climate (Allensworth et al., 2009; Grissom et al., 2021; Hanushek & Rivkin, 2010). The majority of secondary schools have a team of administrators, composed of a principal and one or more assistant principals (APs) or vice principals (VPs). While much research has focused on recruitment, support, development, and retention of principals, the VP role is studied much less often.

Yet, over the past decade, the number of VPs being hired in schools has consistently increased, and their role has been identified as essential to the operations and outcomes of schools (Goldring et al., 2021). In particular, VPs often work closely with students, teachers, and families in ways that principals who are more focused on overall operations of the school may not be able to; and, VPs often serve as a co-instructional leader, lead on issues related to student discipline as well as scheduling and teacher development, evaluation, and support (New Leaders, 2021). Additionally, VPs are an essential component of the “principal pipeline” (Gates et al., 2019; Goldring et al., 2021). Given their important role in student and educator support and development, recruiting, training, supporting, and retaining effective vice principals is an important research focus.

One key practice for supporting and retaining school administrators is providing adequate preparation and effective mentoring, feedback, and evaluation. While much work has been done by states, universities, and research organizations to develop a consistent and uniform process of preparation, induction, mentoring, feedback, and evaluation for its new teachers, none of these components are consistent or uniform for school administrators.

Research has documented the recent increase of administrator burnout and turnover (Beusaert et al., 2016; Tekleselassie & Villereal, 2011), and administrator turnover is even higher in high poverty schools serving students of color (Goldring et al., 2014).

Vice principals have even higher rates of turnover than principals (Bartanen et al., 2021), and they experience the additional challenges of not having clearly defined duties, managing the majority of student behavioral challenges, having inconsistent mentoring and support, and often not being able to participate in the more fulfilling roles of instructional leadership and whole-school change (Glanz, 1994; Kwan, 2009; Oleszewski et al., 2012). It is also important to note that vice principals are “at-will” employees, meaning they can be let go at any time without cause and, in many states, school administrators do not have an equivalent of the teachers’ union to provide job protections.

To inform policy and practices that can promote administrator well-being and stability, which ultimately may impact effective school operations; improved student, community, and educator relations; and a stronger principal pipeline, it is crucial to understand what factors help alleviate burnout and improve job satisfaction of VPs. As such, the purpose of this study was to better understand the sources of burnout and job dissatisfaction of secondary school VPs, and to determine what resources or aspects of support can be provided by the principal, district, and other sources to mitigate the feelings of burnout to reduce administrator turnover. The study occurred in California, the state with the most public school students and one known for its diversity of ethnicity and socio-economic status. We also focused on secondary schools because they are more likely to have one or more assistant principals than elementary schools, which often only have a principal.

Review of Literature on Administrator Burnout and Turnover

Burnout has long been identified as a source of physical, emotional, and psychological stress resulting from several challenging aspects of one's job (Maslach et al., 2001). Employees experience burnout when there is a mismatch between their expectations compared to the reality of their workload, level of control, the presence of rewards, the community, their sense of fairness, and the values they experience in their role (Maslach & Leiter, 1997). Extended feelings of burnout can cause disengagement and eventual departure from one's position, as well as poor health and other negative personal consequences (Tekleselassie & Villereal, 2011).

Due to the importance of the school leader role, it is of particular importance that districts prioritize policies that counteract the aspects of administrators' jobs that heighten burnout and turnover. This can happen by reducing job ambiguity and job conflict, clearly delineating roles within the administrator team, and improving growth satisfaction, or the feelings associated with professional learning and successfully completing tasks (Conley et al., 2007). In this literature review we focus on the factors this study examined that pertain to the preparation and evaluation of new administrators: induction and mentoring, feedback and evaluation, and district infrastructure and support.

Induction and Mentoring

The majority of educators enter school administration through the role of the vice principal (VP) (Goldring et al., 2021). These new administrators are required to complete an induction program approved by the state to have their credential "cleared," or made permanent. In California, the two-year induction program requires new administrators to complete a portfolio of professional growth opportunities with the support of an appointed

mentor (Commission on Teacher Credentialing, 2022a).

In most of the districts included in this study (74 percent), this mentor was a retired administrator outside of the district, so the mentor could not provide advice on district policies, technology, personnel, etc. Due to the variability of the induction mentor, the most important source of on-the-job training and support is the site principal once a VP begins her role (Barnett et al., 2012). Some districts provide a system of training, mentorship, and support referred to as the "principal pipeline," and these comprehensive systems have been shown to have an overall positive impact on student achievement and administrator retention (Gates et al., 2019). However, most districts do not provide such systems of support, leaving VPs to fend for themselves with occasional support from an induction mentor or unpredictable mentoring from the site principals (Barnett et al., 2012). The vice principal position is demanding and requires a wide variety of skills and conflicting duties; it would greatly benefit new VPs to have consistent, quality training, guidance, and mentoring to prepare them for their role.

Feedback and Evaluation

While most K-12 public school districts across the U.S. have clear teacher evaluation protocols based on state laws and recommendations (e.g., EdSource, 2011), individual districts decide on whether and how their administrators will be evaluated (Goldring et al., 2009). Researchers acknowledge that it is difficult to know what to assess, given the varied roles held by principals and VPs. Goldring and associates (2009) found that there is also quite a range of individuals who conduct the actual assessments of school-level administrators. Typically, the superintendent or assistant superintendent evaluates the principal, and the principal evaluates the vice principal. Vice principal evaluations are often dependent on their

relationship with the principal and may not include feedback from teachers or other staff on site. The VP may also have limited sources of support and advocacy in their evaluation, so they can potentially receive a negative evaluation based on their relationship with the principal rather than actual performance.

District Support and Accountability

New administrator induction programs are provided through regional offices of education, private programs, and colleges or universities. For example, in California, one organization that exists to support administrators is the Association of California School Administrators (ACSA). ACSA provides resources to administrators to their members. Most administrators are hired under renewable one-year contracts; states vary in terms of whether they grant tenure or not (EdWeek, 1998). Sometimes tenure means administrators are guaranteed a position in the district, but not necessarily an administrative position.

Research Questions

This study sought to answer the following research questions:

RQ1: What are the greatest contributors to burnout for secondary vice principals?

RQ2: How are preparation, mentorship, feedback, and district infrastructure related to secondary vice principal job satisfaction and outcomes?

RQ3: How does the secondary school administrator experience differ between Title I and non-Title I schools?

Conceptual Framework

This study drew on the Job Demands-Resources (JD-R) model of job satisfaction (Demerouti et al., 2001) to frame the exploration of administrator burnout and

turnover. In this model, job demands are the duties and aspects of a job that require physical, intellectual and emotional effort, while resources refer to the training, knowledge, social network, and physical resources that provide the employee with the knowledge and materials to be successful. In terms of VPs' job satisfaction, this framework would suggest that they need to perceive the balance of demands and resources as fairly even; if the demands exceed the resources, they may experience burnout or job dissatisfaction.

In addition, the Job Characteristics Theory (Hackman & Oldham, 1980) outlines five job characteristics that contribute to motivation, engagement, and job satisfaction: skill variety, task identity, task significance, autonomy, and feedback (Schaufeli & Bakker, 2004). This study examined the presence of these characteristics in the VP's role, and how they impacted the VP's overall job satisfaction and intent to remain or leave their position. As a note, the phrase "job outcomes" in the research question encompasses VPs' job satisfaction as well as their desire to remain in the role of a school administrator, either as a VP or a principal. Since the VP role is typically used as a steppingstone to the principalship, the job outcome under consideration is whether VPs desire to remain in school administration generally, and not whether they want to continue indefinitely as vice principals.

Design and Methods

This study used a mixed-methods research design, with Phase One consisting of a survey of secondary school administrators and Phase Two including qualitative semi-structured interviews. The surveys were sent to all secondary principals and vice principals in four counties in the San Francisco Bay Area: Santa Clara County, San Mateo County, Alameda County, and San Francisco County (n=756). The survey and interview questions were based

on the two conceptual frameworks to determine the presence and quality of mentorship and support, feedback and evaluation, and district infrastructure on the job satisfaction and intent to stay on the behalf of secondary school administrators.

The Job Characteristics theory helped frame some of the interview questions that helped us understand what contributes to an administrator's job satisfaction. The survey data was coded and analyzed using inferential statistics (Lochmiller & Lester, 2017) to uncover associations and relationships between the different factors. The goal was to be able to make conclusions around school and district practices that would best support the professional development and job satisfaction of school administrators.

The population of interest was limited to secondary schools because most elementary schools do not have vice principals and because secondary schools usually have more student behavior incidents and other stressors. Principals were also included in the population; however, principal participation was limited to principals who were VPs within the past five years to ensure that their experiences were recent. A total of 90 school administrators (12% of the survey population) completed surveys that were then analyzed for the purposes of this study.

All survey participants were given the option to participate in the interviews at the end of the survey, with a linked interview interest form. Interview participants were sought who represented diversity in terms of type of school (Title I vs. not Title I), gender, ethnicity, and whether they experienced high or low job satisfaction or burnout. This was done to gather insights into the aspects of the position and

environments that most strongly contributed to or detracted from their overall job satisfaction.

Fourteen administrators were interviewed, and they represented a variety of experiences in terms of their first year as a VP: two described it as "extremely positive;" six described it as "more positive than negative;" four described it as "more negative than positive," and two as "extremely negative."

Data analysis

To analyze the survey data, we employed descriptive statistics as well as t-tests to determine possible correlations between several key factors pertaining to an administrator's role. For the qualitative interviews, the transcripts were deductively coded based on themes from the Maslach Burnout Inventory (MBI) (Maslach et al., 2001), the Job Demands-Resources (JD-R) Model (Demerouti et al., 2001), and Job Characteristics Theory (Hackman & Oldham, 1980).

For RQ1, the following themes were coded: a) overall burnout, including work-life balance; b) workload, including number and intensity of duties; c) role ambiguity and role conflict; d) community and relationships, including those with the principal, other VPs, and the staff; e) reward, including salary and non-pecuniary benefits; and f) fairness and values.

For RQ2, five themes were chosen: preparation (prior to the job); mentorship and support (during the job); informal feedback; formal evaluation; and district infrastructure, support, and accountability. And for RQ3, the transcripts were examined across VPs with experience in Title I vs. non-Title I schools to look for variation in coding patterns and themes.

Findings

We began by examining contributors to burnout for secondary VPs. We found a significant, negative relationship between VP burnout and job satisfaction ($r = -.332$; $p = 0.001$); however, we did not find a significant correlation between burnout and fatigue. While 74 percent of VPs experienced significant fatigue, there was not a relationship between fatigue and burnout, suggesting that causes of fatigue may be multifaceted. As such, we

turned to interviewees to understand the interrelatedness of burnout, fatigue, and job satisfaction. The most common factors that interviewees identified as contributors to burnout were a lack of district support, the lack of preparation and training, negative relationships with one's principal, isolation, mental stress, and levels of student violence, particularly in Title I schools.

One former Title I administrator, who gave herself a 9 out of 10 on a scale of burnout, expressed it like this:

That's the reason why I'm not an AP anymore, because the level of burnout was very high ... I lost my physical health ... the hours are unreasonable ... the fact that we are not given a lunch break ... there's this toxic culture ... the mental stress and the energy you expend at home thinking about things ... parents accuse you of being discriminatory...

Discussions with administrators about burnout confirmed the importance of a more balanced ratio between demands and resources, as explained in the Job Demands-Resources (JD-R) Model (Demerouti et al., 2001).

As described by all fourteen administrators interviewed, the unending list of intense demands of the VP without the accompanying site or district support, preparation and training, or balance in terms of physical breaks, rest, proper food, or even time to use the restroom sharply skewed this position towards the demand side.

The nature of the relationship a VP has with their principal was also related to VP job satisfaction, with VPs reporting more positive relationships with their principal having higher levels of job satisfaction ($r = .563$, $p < 0.001$). VPs that received more feedback from their principal were also more satisfied with their job ($r = .523$, $p < 0.001$). In interviews, VPs described

their principals in four general ways: effective", "ineffective," "negative," and "toxic."

A VP with an effective principal reported that her principal was "great at his job ... super good at communication ... he has coached and mentored me; if that wasn't the case, I don't know if I would have made it, to be honest with you, because it's a hard job. It's super hard."

By contrast, most interviewees (five out of seven) who described their first year as a VP as "extremely negative" or "more negative than positive" also reported negative or extremely negative experiences with their principals during that first year.

One interviewee started with an effective principal at a middle school and described that experience as "extremely positive."

Upon moving to the high school, however, her experience switched to “extremely negative.” She described that principal, whom she described as “toxic,” as follows:

He [the principal] would send us forty-five-minute messages on our phones at like three o'clock in the morning. He would constantly call us in individually, and then together...and just go through just how... We weren't good enough, and he was here to clean us out if we weren't gonna do our job... He made me physically ill... didn't sleep... it's making me physically sick almost just to think about it. Honestly, total PTSD here ... He would write us up... just about how if something went wrong it was all our fault... He would talk crap on us to the staff members... he would belittle us in front of the staff. The level of burnout was... I would have rather worked at Walmart being a greeter... I don't care how much education I have or anything else, it was killing us. He told us that he was good friends with everybody in the district office, and how the district was looking at myself and the other AP... so we couldn't tell anybody or ask anybody in the district office because we felt like we were so isolated.

The relationship with one's principal, as well as factors such as excessive demands, the presence or absence of training or resources, and the physical and mental demands of the job greatly contribute to administrator satisfaction or burnout.

Elements of the System that Support or Constrain VP Support

Next, we aimed to explore what changes in the system can be made to make the VP role more sustainable to increase job satisfaction, retention, and effectiveness and reduce burnout. We particularly focused on preparation, mentorship, feedback, and district infrastructure.

Preparation and Mentoring

In terms of preparation, all the administrators interviewed indicated that administrator preparation programs were minimally helpful in terms of preparing them for the actual work of school administration, and shared that essentially all of the knowledge, skills, and competencies were learned on the job. The interviewed administrators shared that the on-site mentoring was not formalized through the district; whether new VPs received on-the-job mentoring was more a factor of principal

personality and inclination rather than an actual structured support system.

Interviewees who said they received mentoring from their principals appreciated their principals who “mentored by example,” used a “coaching route rather than an authoritarian route,” who were “very accessible from the beginning,” and who asked the VP team for their ideas and perspectives. By contrast, there was a considerable disconnect for many VPs who expected to be mentored by their principal and were not — either not formally, or not at all. If they did not receive instruction or mentoring from their principal, they were forced to seek it out on their own.

VPs in this situation shared that their principals were “always in their offices,” “never offered any positive reinforcement,” and “provided no support.” The mentor provided by the county or organization for the two-year induction program was helpful for about half of the interviewees, but since they only met once a month, this was not a significant source of mentoring.

The survey analysis confirmed this, as there was not a significant relationship between the induction mentor's effectiveness and administrator job satisfaction.

Feedback and Evaluation

Feedback is part of the Job Characteristics Theory (JCT, Hackman & Oldham, 1980), and appropriate feedback has been shown to help individuals grow professionally, develop confidence, and feel more invested and motivated. The absence of feedback can cause people to feel uncertain about their performance, and excessive negative feedback can be outright discouraging and demoralizing, contributing to job dissatisfaction and intent to leave (Harvard Business Review, 2016).

The surveys and interviews alike indicated a lack of consistency, objectivity, and

purpose regarding administrator evaluations, especially for vice principals. Out of the 90 survey responses, 57 percent of VPs were not told how they would be evaluated when they began their jobs. Of the 14 administrators interviewed, seven were evaluated by their principals, one was evaluated by her mentor and the superintendent, and six were not evaluated at all their first year. Two were not evaluated once in eight years; two were evaluated only in their first year of four; and none were evaluated every year. For those that were evaluated, practices ranged from a goal-setting document to a checklist or self-rating to a matrix based on goals. As one VP shared:

There should be observations, just like teachers, there should be feedback, there should be a cycle, right? It shouldn't be that you rub someone the wrong way, and then, all of a sudden, you find out you're being reassigned to the classroom! There needs to be a feedback loop ... I also think the staff should be able to evaluate administrators ... I think that would make administrators think twice before they do things if they know teachers are going to evaluate them, or classified staff or secretaries are going to evaluate them.

District Infrastructure and Support

The level of support VPs received from the district was significantly related to their job satisfaction and feelings of burnout. The "district support" index was an average of all nine of the factors on the survey pertaining to district infrastructure, including whether the principal was held accountable for training the VP, whether the district provided professional development or a formal network of administrators for support, and whether the VP felt like the district leaders were invested in their training and success. We found that strong district support was positively correlated with high VP job satisfaction ($r = 0.434$) for the survey respondents. The survey respondents' comments and responses from interviewees both indicated as much variability in terms of district support as there was in mentoring from site principals. VPs who felt supported cited support groups, positive relationships with

someone at the district office, and partnerships with outside leadership consortiums as helpful district resources. Ten of the fourteen interviewees had little to no district support, professional development, or support groups for new administrators. One interviewee shared that "the top contributor to [her] feelings of burnout [was] lack of district support."

Variation Across District Title I Status

Finally, we explored if and how secondary VPs experiences differ among those in Title I and non-Title I schools. The accounts detailed by the interviewees indicated some strong differences in terms of work conditions and levels of burnout and satisfaction among VPs serving in low- versus high-income schools. The survey respondents were fairly evenly split between Title I (44 percent) and non-Title I (48 percent) schools.

We compared the mean values from the responses from Title I compared to non-Title I VPs on ten indicators, and VPs in Title I schools reported significantly ($p < .05$) more challenging first years compared to expectations, and their job satisfaction was significantly lower. Title I VPs received significantly less helpful feedback from their principals compared to their non-Title I counterparts, and they had less support from their districts. Vice principals serving in Title I schools received less training from their districts and disagreed more strongly with the statements about districts holding principals accountable for supporting and mentoring them.

During the interviews, the VPs at Title I schools spent an average of 82 percent of their day dealing with student discipline and supervision, compared to 56 percent for the non-Title I VPs who gave estimates. The five VPs who described extremely toxic, challenging principals all worked for Title I schools, and they spent a good deal of their interview time talking about how their principals' lack of leadership and communication skills, emotional intelligence, and mentorship all deeply influenced their experience in a negative manner. Comments from VPs from Title I interviewees included that their burnout on a scale of one to 10 was a

ten, or an eleven: "I was done with education"; "my mental health was suffering"; "balance is not possible in this job"; "you burn out from seeing all the trauma in the children." From both the survey and interview responses, there were a lot more vice principals who had unsupportive principals, districts, and overall negative experiences in Title I schools than in non-Title I schools.

Recommendations and Policy Implications

At the conclusion of this study, the current system of preparation, mentorship, evaluation, and district support and accountability for school administrators—and especially for vice principals—is inconsistent between schools and districts. Some new administrators are mentored well by their principals and fellow VPs, and profit from district systems that provide feedback and support to help them become competent and confident in their roles. Others are not provided with the necessary breadth and depth of training on the myriad, often competing or conflicting tasks that they must master and balance during their extremely busy and demanding days at a school site. Feedback and evaluation of new as well as seasoned administrators are similarly inconsistent, subjective, and often dependent on one person's opinion or perspective.

To improve VP support and development, the authors make the following recommendations:

1 - States should adopt a principal pipeline system similar to that proposed by Gordon (2020). This system is a coherent, standardized system that includes administrator recruitment, participation in a quality principal preparation program, continued professional development, and licensure renewal for all school administrators. In addition, there should be administrator shadowing in advance of assuming the VP role; a coherent and required mentoring program that involves both the site principal and a skilled district administrator; and continual feedback and evaluation process that involves an annual, 360 multi-rater system for all administrators. Principals should be held accountable for mentoring and giving regular feedback to new vice principals, with weekly check-ins built into the school schedule and enforced by the district.

2- There need to be measures put in place that can dramatically reduce the burden and burnout experienced by school administrators, especially those working in high poverty schools and in secondary schools. Seventy-four percent of new VPs from this study indicated that their level of fatigue was between a seven and a ten, with ten being “very high.” Specific suggestions include staggered work shifts for administrators; additional administrators and counselors provided for Title I schools; and stipends administrators choosing to work in Title I schools. Administrators should all be enrolled in some sort of district collaborative that protects their safety, physical health, employment status, and professional conditions such as restroom and lunch breaks.

3 - District leaders should work to dramatically improve the connection between the district office and the school sites. District administrators should make routine and regular visits to school sites that include rotating check-ins with principals, VPs, teachers, counselors, and other school staff. This would give teachers the sense that the district cares about what is happening at their site and would provide school staff members with the opportunity to give confidential feedback that they typically are unable to provide. Annual district-wide surveys at each school would enable districts to gather honest feedback about staff, school climate, district policies, and other relevant measures.

4 - There should be an established system such as a three- or four-year cycle by which principals are up for contract renewal based on the multi-rater system and other measures of performance. Principals should not be allowed to just remain at a school for years merely because there have been no formal complaints about them. While truly negligent principals will often be removed, mediocre principals should also be expected to continue to perform at high levels or allow their position to be filled by someone more competent. Similarly, VPs should be held accountable but should also not be retained or removed simply based on principal opinion.

With the role of school administrator an undisputed, significant force for hiring and retaining effective teachers, creating a positive school climate, and promoting student success (Allensworth et al., 2009; Grissom et al., 2021; Hanushek & Rivkin, 2010), there needs to be a more consistent, effective, and research-based plan for preparing, mentoring, evaluating, and

supporting school administrators. These are not processes that can be left to chance, personality, or personal inclination, but ones that should be revised and standardized for the success and well-being of all school administrators, and, in turn, the staff and students at every site.

Author Biographies

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References

- Allensworth, E., Ponisciak, S., & Mazzeo, C. (2009). *The schools teachers leave: Teacher mobility in Chicago Public Schools*. Consortium on Chicago School Research - University of Chicago.
- Barnett, B. G., Shoho, A. R., & Oleszewski, A. M. (2012). The job realities of beginning and experienced assistant principals. *Leadership and Policy in Schools, 11*(1), 92–128. <https://doi.org/10.1080/15700763.2011.611924>
- Bartanen, B., Rogers, L. K., & Woo, D. S. (2021). Assistant principal mobility and its relationship with principal turnover. *Educational Researcher, 50*(6), 0013189X2199310. <https://doi.org/10.3102/0013189x21993105>
- Beusaert, S., Froehlich, D. E., Devos, C., & Riley, P. (2016). Effects of support on stress and burnout in school principals. *Educational Research, 58*(4), 347–365. <https://doi.org/10.1080/00131881.2016.1220810>
- Commission on Teacher Credentialing (CTC). (2022). www.ctc.ca.gov. <https://www.ctc.ca.gov/educator-prep/teacher-induction>
- Conley, S., Shaw, S., & Glasman, N. (2007). Correlates of job and growth satisfaction among secondary school administrators. *Journal of School Leadership, 17*(1), 54–88. <https://doi.org/10.1177/105268460701700103>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499–512. <https://doi.org/10.1037//0021-9010.86.3.499>
- EdSource. (2011). How state laws and collective bargaining shape the way teachers are evaluated, paid, and dismissed in California. *EdSource*. <https://doi.org/www.edsource.org>
- Education Week. (1998, April 1). *Principals Losing Tenure*. <https://www.edweek.org/education/principals-losing-tenure/1998/04#:~:text=After%20a%20probationary%20period%20that>
- Gates, S., Baird, M., Master, B., & Chavez-Herrerias, E. (2019). *Principal Pipelines A Feasible, Affordable, and Effective Way for Districts to Improve Schools*. RAND Corporation, Santa Monica, CA.
- Glanz, J. (1994). Redefining the roles and responsibilities of assistant principals. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas, 67*(5), 283–287. <https://doi.org/10.1080/00098655.1994.9956089>
- Goldring, E., Cravens, X., Murphy, J., Porter, Andrew C., Elliott, Stephen N., & Carson, B. (2009). The evaluation of principals: What and how do states and urban districts assess leadership? *The Elementary School Journal, 110*(1), 19–39. <https://doi.org/10.1086/598841>

- Goldring, E., Rubin, M., & Herrmann, M. (2021). *The role of assistant principals: Evidence and insights for advancing school leadership*. The Wallace Foundation.
- Goldring, R., & Taie, S. (2014). *Principal attrition: Results from the 2012-13 principal follow-up survey*. National Center for Education Statistics.
- Gordon, S. P. (2020). The principal development pipeline: A call for collaboration. *NASSP Bulletin*, 104(2), 61–84. <https://doi.org/10.1177/0192636520923404>
- Grissom, J., Egalite, A., & Lindsay, C. (2021). *How principals affect students and schools: A systematic synthesis of two decades of research*. New York: The Wallace Foundation. <http://www.wallacefoundation.org/principalsynthesis>
- Hackman, J. R., & Oldham, G. R. (1980). *Work Redesign*. Addison-Wesley.
- Hanushek, E. A., & Rivkin, S. G. (2010). Generalizations about using value-added measures of teacher quality. *American Economic Review*, 100(2), 267–271.
- Harvard Business Review. (2016). *HBR guide to delivering effective feedback*. Harvard Business Review Press. <https://doi.org/10.1257/aer.100.2.267>
- Kwan, P. (2009). The vice-principal experience as a preparation for the principalship. *Journal of Educational Administration*, 47(2), 191–205. <https://doi.org/10.1108/09578230910941048>
- Lochmiller, C. R., & Lester, J. N. (2017). *An introduction to educational research: Connecting methods to practice*. Sage Publications, Los Angeles.
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it*. San Francisco, CA: Jossey-Bass.
- Maslach, C., Schaufeli, W., & Leiter, M. (2001). *Job burnout*. *Annual Review of Psychology*, 398–422.
- New Leaders. (2021). “Our role is critical”: How to best support assistant principals. <https://www.newleaders.org/blog/our-role-is-critical-how-to-best-support-assistant-principals>
- Oleszewski, A., Shoho, A., & Barnett, B. (2012). The development of assistant principals: A literature review. *Journal of Educational Administration*, 50(3), 264–286. <https://doi.org/10.1108/09578231211223301>
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315. <https://doi.org/10.1002/job.248>

Tekleselassie, A. A., & Villarreal, P. (2011). Career mobility and departure intentions among school principals in the United States: Incentives and disincentives. *Leadership and Policy in Schools*, 10(3), 251–293. <https://doi.org/10.1080/15700763.2011.585536>