



## Introduction

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In 2010 the Colorado State Legislature passed Senate Bill 10-191, which changed the way Colorado educators are supported and evaluated in order to improve students' college and career outcomes. To assist school districts in implementing the new evaluation requirements, the Colorado Department of Education (CDE) developed State Model Evaluation Systems as options for districts to use for the evaluation of teachers, principals (which includes assistant principals), and specialized service professionals (SSPs). The current report presents findings from the third year of the pilot of the principal system. Companion reports for [teachers](#) and [SSPs](#) can be found on the CDE website.

The Colorado State Model Evaluation System for Principals has been piloted in school districts of varying size and location for three consecutive school years. The number of principals and districts represented are as follows:

- 2011-2012 school year: 241 principals in 23 districts
- [2012-2013 school year](#): 410 principals in 21 districts
- 2013-2014 school year: 406 principals in 17 districts

Although 2013-2014 was the third year that these districts experienced the State Model Evaluation System, it was only the first year of required participation per the legislation (meaning all districts in the state were required to implement new evaluation systems by the 2013-2014 school year). Therefore, administrators and district leaders were dealing with new “official” requirements pertaining to educator evaluations. There continues to be variability in the way districts are implementing these complex systems. To support district efforts and growth, CDE has provided resources such as an online system to help with inter-rater agreement ([Elevate Colorado](#)) and an online platform to organize professional growth and evaluation information ([Colorado State Model Performance Management System](#)). Since schools, districts, and CDE are all participating in a continuous improvement cycle with regard to the new evaluation process, all findings presented here are considered preliminary.

## Summary of Key Findings

- There is a moderate amount of variability in the distributions of principal ratings, particularly at the element level. As with prior years, this finding indicates that the professional practice rubric captures multiple aspects of school leadership as well as differences in principal practice.
- Colorado principals receive the highest ratings on Standard 3 (School Culture and Equity Leadership) and the lowest ratings on Standard 6 (External Leadership).
- The large majority of principals maintained or improved their ratings in subsequent school years.
- Principal ratings vary based on the district, school level, years of experience, and degree.
- CDE continues to find evidence for reliability and validity in the State Model Evaluation System for Principals.

## Colorado Principal Quality Standards

Before reviewing findings from the Colorado State Model Evaluation System for Principals, it is important to consider what comprises the Colorado Principal Quality Standards, which are the foundation of the professional practice rubric. Note that the rubric measures Standards 1 through 6 (summarized in Figure 1). Standard 7, which captures principal responsibility for student academic growth, is not assessed by the professional practice rubric and is not addressed specifically in this report except when examining the correlations between principals' ratings on the rubric and student growth measures.

Figure 1. *Colorado Principal Quality Standards and corresponding elements*

**Quality Standard I: Principals Demonstrate Strategic Leadership**

**Element a: School Vision, Mission and Strategic Goals:** Principals collaboratively develop the vision, mission, values, expectations and goals of the school, collaboratively determine the processes used to establish these foundations, and facilitate their integration into the life of the school community.

**Element b: School Plan:** Principals ensure that a plan is in place that supports improved academic achievement and developmental outcomes for all students, and provides for data-based progress monitoring.

**Element c: Leading Change:** Principals solicit input and collaborate with staff and their school community to implement strategies for change and improvements that result in improved achievement and developmental outcomes.

**Element d: Distributive Leadership:** Principals create and utilize processes to distribute leadership and support collaborative efforts throughout the school among Teachers and Administrators.

**Quality Standard II: Principals Demonstrate Instructional Leadership**

**Element a: Curriculum, Instruction, Learning and Assessment:** Principals promote school-wide efforts to establish, implement and refine appropriate expectations for curriculum, instructional practices, assessment and use of data on student learning based on scientific research and evidence-based practices that result in student academic achievement.

**Element b: Instructional Time:** Principals create processes and schedules which maximize instructional, collaborative and preparation time.

**Element c: Implementing High-quality Instruction:** Principals support Teachers through ongoing, actionable feedback and needs-based professional development to ensure that rigorous, relevant and evidence-based instruction and authentic learning experiences meet the needs of all students and are aligned across P-20.

**Element d: High Expectations for all Students:** Principals hold all staff accountable for setting and achieving rigorous performance goals for all students, and empower staff to achieve these goals across content areas.

**Element e: Instructional Practices:** Principals demonstrate a rich knowledge of effective instructional practices, as identified by research on best practices, in order to support and guide Teachers in data-based decision making regarding effective practices to maximize student success.

**Quality Standard III: Principals Demonstrate School Culture and Equity Leadership**

**Element a: Intentional and Collaborative School Culture:** Principals articulate, model and positively reinforce a clear vision and values of the school's culture, and involve students, families and staff in creating an inclusive and welcoming climate that supports it.

**Element b: Commitment to the Whole Child:** Principals promote the cognitive, physical, social and emotional health, growth and skill development of every student.

**Element c: Equity Pedagogy:** Principals demonstrate a commitment to a diverse population of students by creating an inclusive and positive school culture, and provide instruction in meeting the needs of diverse students, talents, experiences and challenges in support of student achievement.

**Element d: Efficacy, Empowerment and a Culture of Continuous Improvement:** Principals and their leadership team foster a school culture that encourages continual improvement through reliance on research, innovation, prudent risk-taking, high expectations for all students and Teachers, and a valid assessment of outcomes.

**Quality Standard IV: Principals Demonstrate Human Resource Leadership**

**Element a: Professional Development/Learning Communities:** Principals ensure that the school is a professional learning community that provides opportunities for collaboration, fosters Teacher learning and develops Teacher leaders in a manner that is consistent with local structures, contracts, policies and strategic plans.

**Element b: Recruiting, Hiring, Placing, Mentoring, and Dismissal of Staff:** Principals establish and effectively manage processes and systems that ensure a knowledgeable, high-quality, high-performing staff.

**Element c: Teacher and Staff Evaluation:** Principals evaluate staff performance using the District's Educator evaluation system in order to ensure that Teachers and staff are evaluated in a fair and equitable manner with a focus on improving Teacher and staff performance and, thus, student achievement.



Figure 1 cont. *Colorado Principal Quality Standards and corresponding elements*

**Quality Standard V: Principals Demonstrate Managerial Leadership**

**Element a: School Resources and Budget:** Principals establish systems for marshaling all available school resources to facilitate the work that needs to be done to improve student learning, academic achievement and overall healthy development for all students.

**Element b: Conflict Management and Resolution:** Principals proactively and efficiently manage the complexity of human interactions and relationships, including those among and between parents/guardians, students and staff.

**Element c: Systematic Communication:** Principals facilitate the design and utilization of various forms of formal and informal communication with all school stakeholders.

**Element d: School-wide Expectations for Students and Staff:** Principals ensure that clear expectations, structures, rules and procedures are established for students and staff.

**Element e: Supporting Policies and Agreements:** Principals regularly update their knowledge of federal and state laws, and School District and board policies, including negotiated agreements, if applicable, and establish processes to ensure that these policies, laws and agreements are consistently met and implemented.

**Element f: Ensuring an Orderly and Supportive Environment:** Principals ensure that the school provides an orderly and supportive environment that fosters a climate of safety, respect, and well-being.

**Quality Standard VI: Principals Demonstrate External Development Leadership**

**Element a: Family and Community Involvement and Outreach:** Principals design and/or utilize structures and processes which result in family and community engagement, support and ownership for the school.

**Element b: Professional Leadership Responsibilities:** Principals strive to improve the profession by collaborating with their colleagues, School District leadership and other stakeholders to drive the development and successful implementation of initiatives that better serve students, Teachers and schools at all levels of the education system. They ensure that these initiatives are consistent with federal and state laws, School District and board policies, and negotiated agreements where applicable.

**Element c: Advocacy for the School:** Principals develop systems and relationships to leverage the School District and community resources available to them both within and outside of the school in order to maximize the school's ability to serve the best interest of students and families.

## Contents of Report

The subsequent sections of this report focus on the results of the year three pilot analyses on the State Model Evaluation System for Principals. The sections are as follows:

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Section 3 – Ratings Distributions from Year to Year (p. 10)

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Section 5 – Ratings Distributions by Principal Employment and Demographic Characteristics (p. 11)

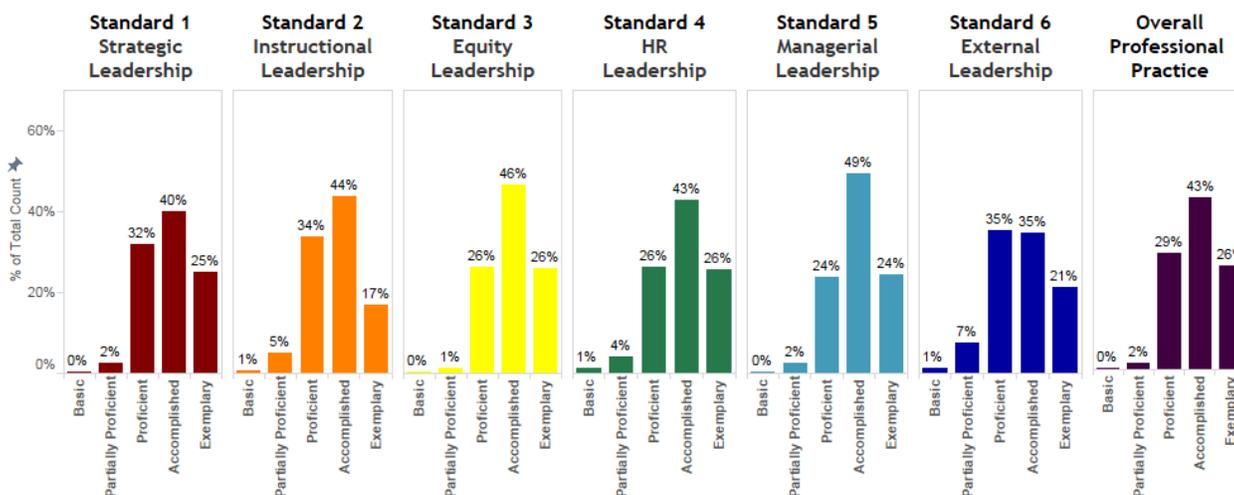
Section 6 – Ratings Distributions by Evaluator Employment and Demographic Characteristics (p. 13)

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## Section 1. Distributions of Standard and Overall Professional Practice Ratings

This section will review findings pertaining to the distributions of Standards 1 through 6, as well as the overall professional practice rating (the subsequent section delves into each individual standard). Figure 2 presents the distributions of ratings across the six standards and the final overall professional practice rating. Although there is not as much variation in the standard distributions as is seen at the element level, there is enough variation to indicate that the rubric and evaluators are differentiating between principals and multiple aspects of school leadership.

Figure 2. *Standard and overall professional practice ratings distributions*



Notes. Percentages may not add to 100 percent because of rounding.

Pilot principals received the highest ratings on Standard 3, which pertains to leadership around school culture and equity.<sup>1</sup> In contrast, principals received the lowest ratings on Standard 6, for the second year in a row. Standard 6 encompasses practices related to external leadership including family and community involvement and advocacy for the school.

With regard to the overall professional practice ratings, 98 percent of principals received a summative professional practice rating of proficient or higher (compared to last year when 94 percent of principals received a summative rating of proficient or higher) with the largest number of educators receiving a rating of accomplished. Forty-three percent of principals received a summative rating of accomplished and 26 percent earned the highest rating of exemplary (up from 30 and 18 percent last year, respectively). On the other end of the spectrum, 2 percent of principals received a summative rating of partially proficient while fewer than 1 percent received the lowest rating of basic.

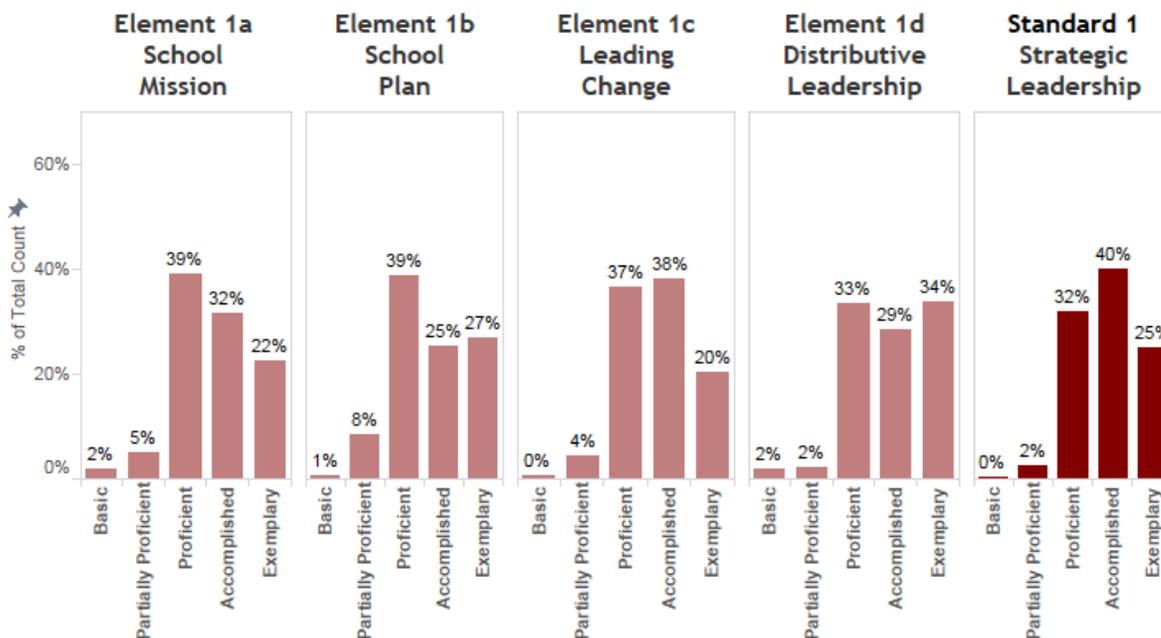
<sup>1</sup> Note that the distinction of “highest” and “lowest” rated standards and elements is based on an average across all rating categories (after converting each performance category to a numerical value).

Ratings on the six standards are positively correlated with each other, indicating that the professional practice rubric captures interrelated aspects of school leadership. The finding that the ratings are positively correlated means that principals who receive high ratings on one standard are more likely to receive high ratings on the other standards. Correlations between the standard ratings are strong<sup>2</sup> ( $0.58 < \rho < 0.73$ ; calculated using Spearman’s rho, although Pearson correlation coefficients are nearly identical). Each standard rating is also strongly correlated to the overall rating ( $0.74 < \rho < 0.82$ ). Reliability analyses also suggest that the ratings demonstrate high internal consistency, at a level congruent with typical ranges reported in large-scale standardized assessments (Cronbach’s  $\alpha = 0.92$ ). The finding that standard ratings are highly correlated and internally cohesive provides evidence for reliability and consistency in the rubric.

## Section 2. Distributions of Element Ratings

This section explores the distributions of element ratings within each standard. The elements within Standard 1 (Strategic Leadership) are presented in Figure 3. Ninety-seven percent of principals received a rating of proficient or higher on Standard 1 (with 65 percent receiving an accomplished or exemplary rating).

Figure 3. *Standard 1: Strategic Leadership - elements and summative rating*



Notes. Percentages may not add to 100 percent because of rounding.

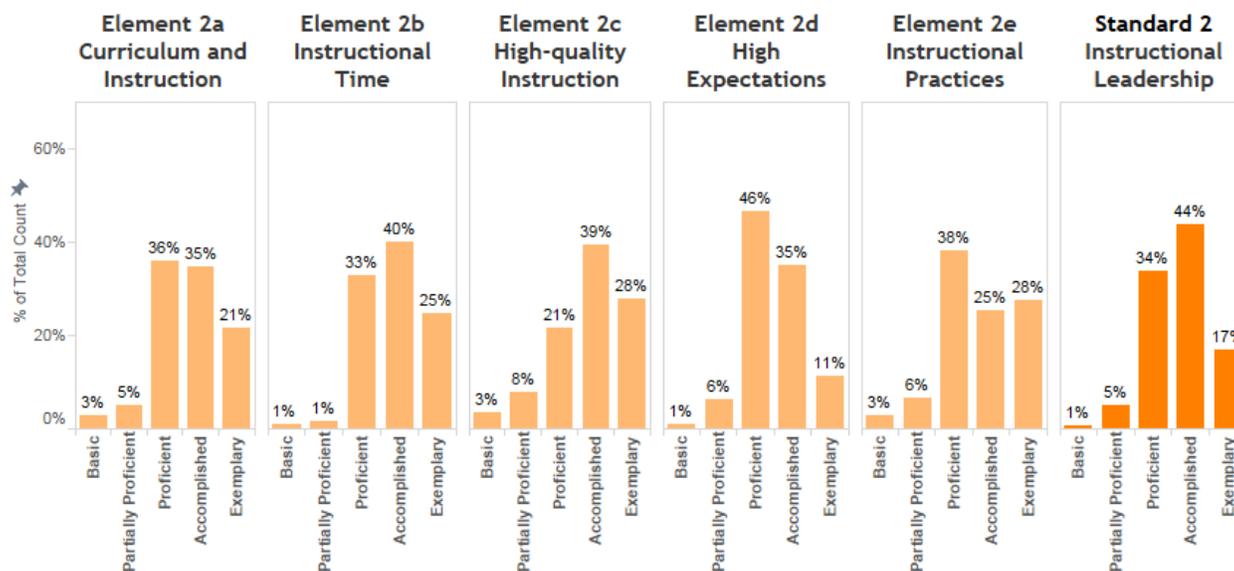
<sup>2</sup> Correlation coefficients indicate the strength of the relationship between two measures; a value of 0 indicates no relationship and a value of 1 indicates a perfect positive relationship (while a value of -1 indicates a perfect negative relationship). General guidelines for interpreting the value of the coefficient are: a correlation coefficient under .3 indicates a weak relationship, .3-.49 indicates a moderate relationship, and .5 and above indicates a strong relationship.

Ratings on the elements within Standard 1 are strongly correlated ( $0.54 < \rho < 0.66$ ) and each element rating is strongly correlated to the overall standard rating ( $0.76 < \rho < 0.80$ ). Reliability analyses also suggest that the ratings demonstrate high internal consistency (Cronbach's  $\alpha = 0.85$ ). All of the standards have reliability statistics that are at a level consistent with typical ranges reported in large-scale standardized assessments. These statistics provide evidence that the professional practice rubric is demonstrating certain types of reliability.

Standard 2 (Instructional Leadership) is depicted in Figure 4, with 95 percent of principals receiving a rating of proficient or higher and 61 percent meeting the higher bar of accomplished or exemplary. The lowest rated element on the rubric is Element 2d (High Expectations), similar to the 2012-2013 findings. Considering the percent of principals receiving low ratings (because averages across all ratings categories can mask some of the lower ratings), 11 percent of principals received below proficient ratings on Element 2c (High-quality Instruction).

Ratings on the elements within Standard 2 are moderately to strongly correlated ( $0.42 < \rho < 0.64$ ) and each element rating is strongly correlated to the overall standard rating ( $0.64 < \rho < 0.80$ ). Reliability analyses also suggest that the ratings demonstrate high internal consistency (Cronbach's  $\alpha = 0.85$ ).

Figure 4. *Standard 2: Instructional Leadership - elements and summative rating*

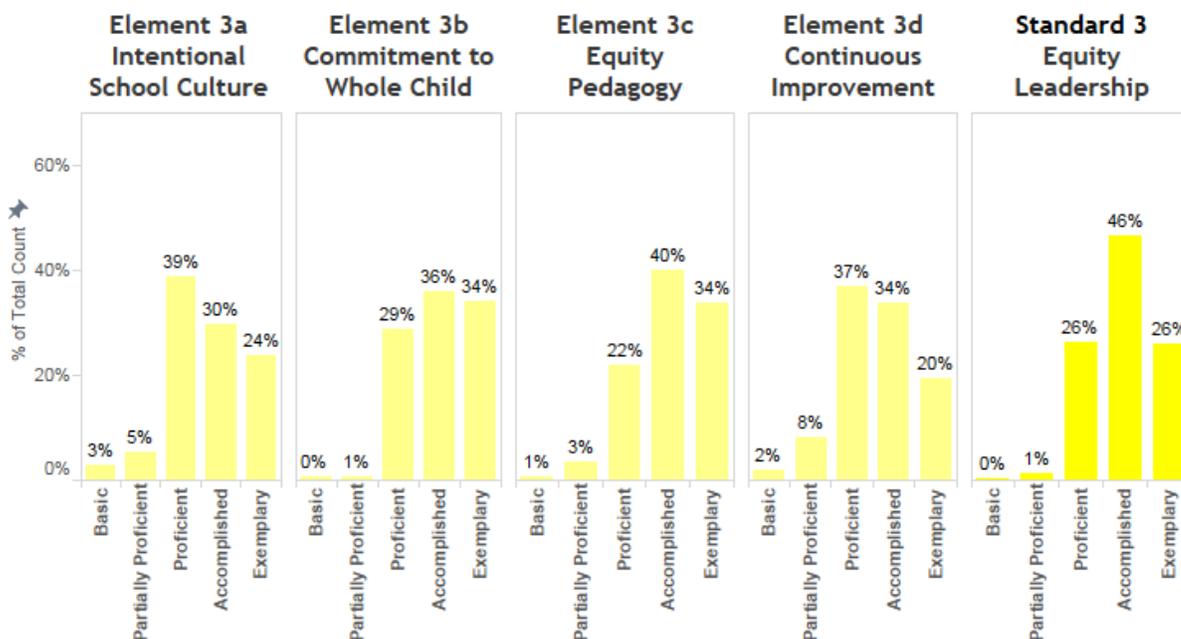


Notes. Percentages may not add to 100 percent because of rounding.

The highest rated standard on the rubric is Standard 3 (Equity Leadership) with 98 percent of principals receiving a rating of proficient or higher and 72 percent meeting the higher bar of accomplished or exemplary (illustrated in Figure 5). Element 3b (Commitment to the Whole Child) is one of the highest rated elements on the rubric, as was also the case in 2012-2013. Element 3c (Equity Pedagogy) is another high-rated element, however Element 3d (Continuous Improvement) is one of the lower-rated elements with 10 percent of principals receiving a rating below proficient.

Ratings on the elements within Standard 3 have moderate to strong correlations ( $0.46 < \rho < 0.56$ ) and each element rating is strongly correlated to the overall standard rating ( $0.72 < \rho < 0.76$ ). Reliability analyses also suggest that the ratings demonstrate high internal consistency (Cronbach's  $\alpha = 0.80$ ).

Figure 5. *Standard 3: Equity Leadership - elements and summative rating*



Notes. Percentages may not add to 100 percent because of rounding.

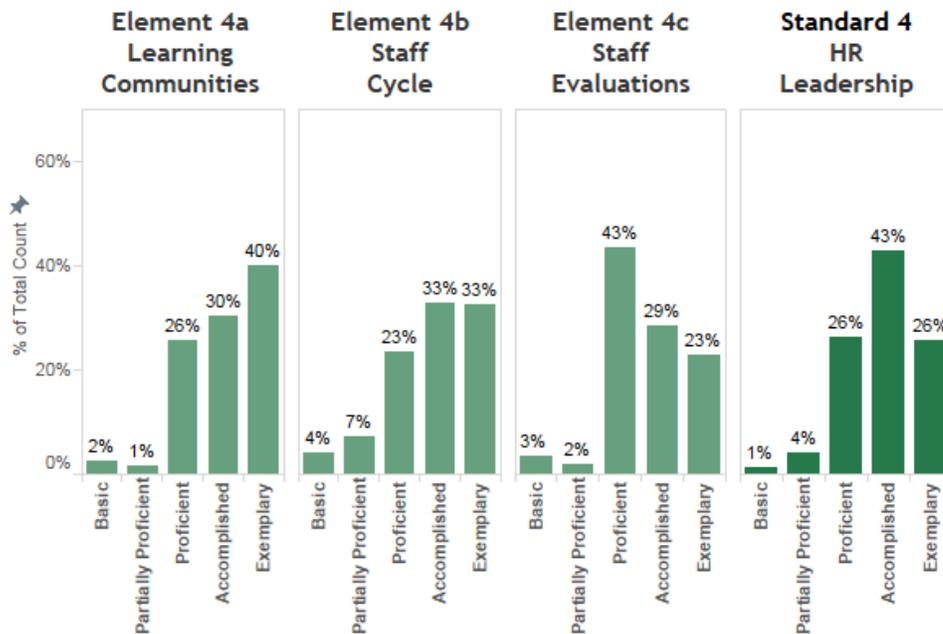
The distributions for the elements within Standard 4 (HR Leadership) are depicted in Figure 6. Ninety-five percent of principals received a rating of proficient or higher and 69 percent were rated accomplished or exemplary on the standard. Element 4a (Learning Communities) is one of the highest rated elements on the professional practice rubric, as it was in the 2012-2013 school year. Conversely, Element 4c (Staff Evaluations) is one of the lowest rated elements on the rubric. Considering the percent below proficient rather than the average, 11 percent of principals received a rating below proficient on Element 4b (Staff Cycle).

Ratings on the elements within Standard 4 are moderately to strongly correlated ( $0.44 < \rho < 0.54$ ) and each element rating is strongly correlated to the overall standard rating ( $0.72 < \rho < 0.82$ ). Reliability analyses also suggest that the ratings demonstrate high internal consistency (Cronbach’s  $\alpha = 0.75$ ).

The elements and standard ratings for Standard 5 (Managerial Leadership) are shown in Figure 7. Ninety-seven percent of principals received a rating of proficient or higher and 73 percent met the higher bar of accomplished or exemplary. Two of the highest rated elements on the rubric are in this standard: Elements 5d (School-wide Expectations) and 5f (Supportive Environment). Element 5d is actually the highest rated element on the rubric and Element 5f was also one of the highest rated elements in 2012-2013. However, 5a (Resources and Budget) is one of the lowest rated elements on the rubric, as it was in 2012-2013, with 15 percent receiving a rating below proficient. Fifteen percent of principals received below proficient ratings on 5e (Policies and Agreements) as well.

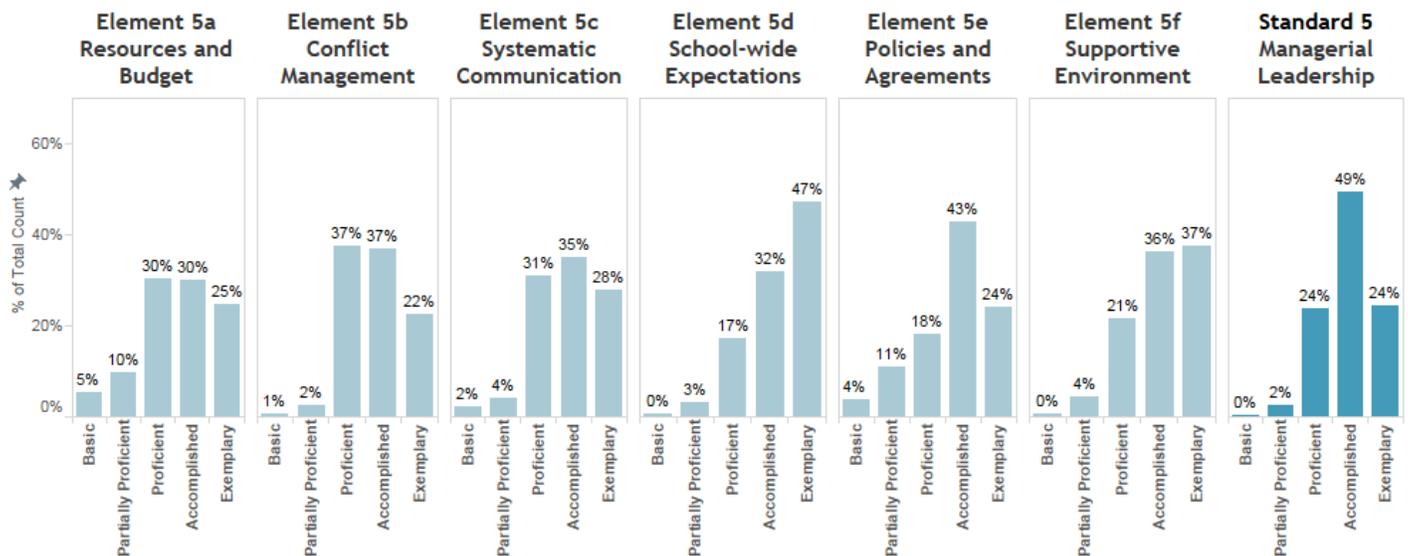
Ratings on the elements within Standard 5 have moderate and strong correlations ( $0.32 < \rho < 0.58$ ). Each element rating is strongly correlated to the overall standard rating ( $0.61 < \rho < 0.72$ ). Reliability analyses also suggest that the ratings demonstrate high internal consistency (Cronbach’s  $\alpha = 0.83$ ).

Figure 6. Standard 4: HR Leadership - elements and summative rating



Notes. Percentages may not add to 100 percent because of rounding.

Figure 7. Standard 5: Managerial Leadership - elements and summative rating

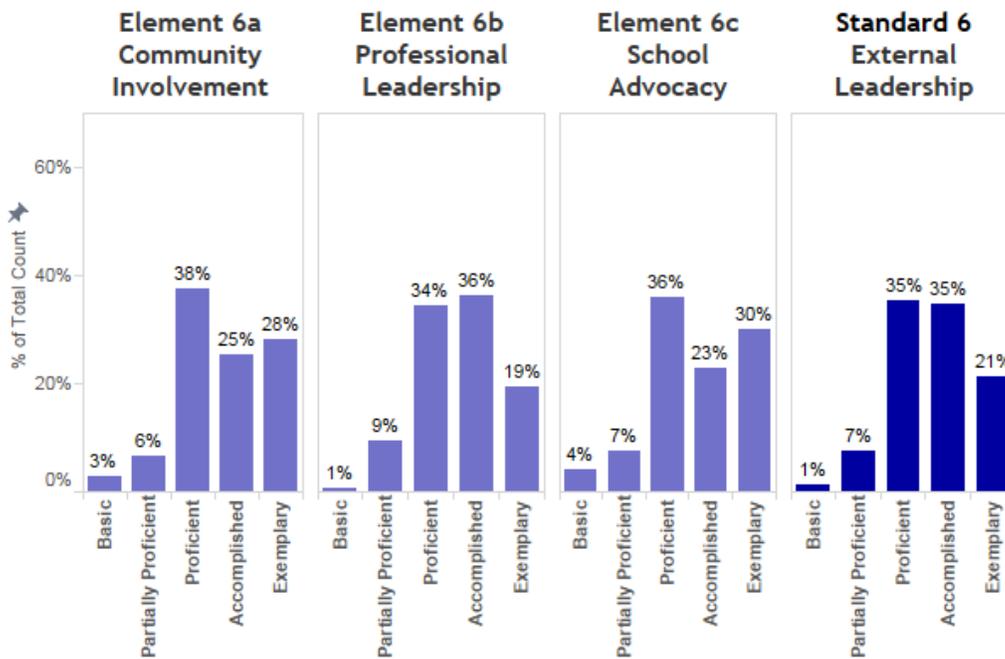


Notes. Percentages may not add to 100 percent because of rounding.

Represented in Figure 8, Standard 6 (External Leadership) is the lowest rated standard, with 91 percent of principals receiving a rating of proficient or higher and 56 percent meeting the higher bar of accomplished or exemplary. Element 6b (Professional Leadership) is one of the lowest rated elements on the rubric with 10 percent of principals receiving a rating below proficient. A higher percentage of principals received below proficient ratings on 6c (School Advocacy; 11 percent below proficient) as well.

Ratings on the elements within Standard 6 have moderate to strong correlations ( $0.56 < \rho < 0.61$ ) and each element rating is strongly correlated to the overall standard rating ( $0.79 < \rho < 0.85$ ). Reliability analyses also suggest that the ratings demonstrate high internal consistency (Cronbach's  $\alpha = 0.81$ ).

Figure 8. *Standard 6: External Leadership - elements and summative rating*



Notes. Percentages may not add to 100 percent because of rounding.

In summary, the highest standard on the professional practice rubric is Standard 3 (School Culture and Equity Leadership). The highest rated elements (in order from highest) are:

- **Element 5d: School-wide Expectations for Students and Staff:** Principals ensure that clear expectations, structures, rules and procedures are established for students and staff.
- **Element 5f: Ensuring an Orderly and Supportive Environment:** Principals ensure that the school provides an orderly and supportive environment that fosters a climate of safety, respect, and well-being.
- **Element 4a: Professional Development/Learning Communities:** Principals ensure that the school is a professional learning community that provides opportunities for collaboration, fosters Teacher learning and develops Teacher leaders in a manner that is consistent with local structures, contracts, policies and strategic plans.
- **Element 3c: Equity Pedagogy:** Principals demonstrate a commitment to a diverse population of students by creating an inclusive and positive school culture, and provide instruction in meeting the needs of diverse students, talents, experiences and challenges in support of student achievement.
- **Element 3b: Commitment to the Whole Child:** Principals promote the cognitive, physical, social and emotional health, growth and skill development of every student.

The lowest rated standard is Standard 6 (External Leadership). The lowest rated elements (in order from lowest) are:

- **Element 2d: High Expectations for all Students:** Principals hold all staff accountable for setting and achieving rigorous performance goals for all students, and empower staff to achieve these goals across content areas.
- **Element 5a: School Resources and Budget:** Principals establish systems for marshaling all available school resources to facilitate the work that needs to be done to improve student learning, academic achievement and overall healthy development for all students.
- **Element 3d: Efficacy, Empowerment and a Culture of Continuous Improvement:** Principals and their leadership team foster a school culture that encourages continual improvement through reliance on research, innovation, prudent risk-taking, high

expectations for all students and Teachers, and a valid assessment of outcomes.

- **Element 6b: Professional Leadership Responsibilities:** Principals strive to improve the profession by collaborating with their colleagues, School District leadership and other stakeholders to drive the development and successful implementation of initiatives that better serve students, Teachers and schools at all levels of the education system. They ensure that these initiatives are consistent with laws, School District and board policies, and negotiated agreements where applicable.
- **Element 4c: Teacher and Staff Evaluation:** Principals evaluate staff performance using the District’s Educator evaluation system in order to ensure that Teachers and staff are evaluated in a fair and equitable manner with a focus on improving Teacher and staff performance and, thus, student achievement.

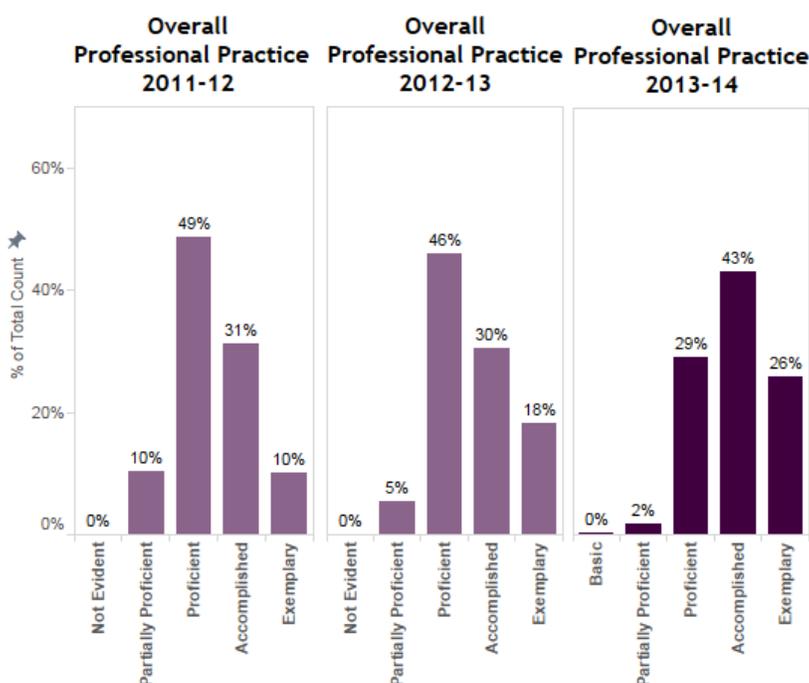
### Section 3. Ratings Distributions from Year to Year

The Colorado State Model Evaluation System for Principals was designed around the belief that meaningful and specific feedback throughout the school year can improve practice in the short- and long-term. Under an aligned and supportive system, school leaders have the opportunity to show professional growth in the current year and subsequent years.

To examine professional growth from year to year, CDE looked at the percentage of principals who maintained or improved their overall rating from 2011-2012 (pilot year 1) and 2012-2013 (pilot year 2) to 2013-2014 (pilot year 3). Considering the 154 principals for whom CDE received ratings in 2011-2012 and 2013-2014, 39 percent of principals received the same final rating and 57 percent had improved their performance two years later ( $p = .47$ ). There is a larger sample of principals for whom CDE has ratings in 2012-2013 and 2013-2014. For those 298 principals, 49 percent of principals received the same final rating and 46 percent improved their performance ( $p = .66$ ).

At the aggregate, there is a slight upward shift in the distributions from 2011-2012 to 2012-2013 and a larger shift in the 2013-2014 school year (shown in Figure 9). Essentially, there is a much larger percentage of principals receiving a rating of accomplished or exemplary in year three of the pilot than in the previous two years.

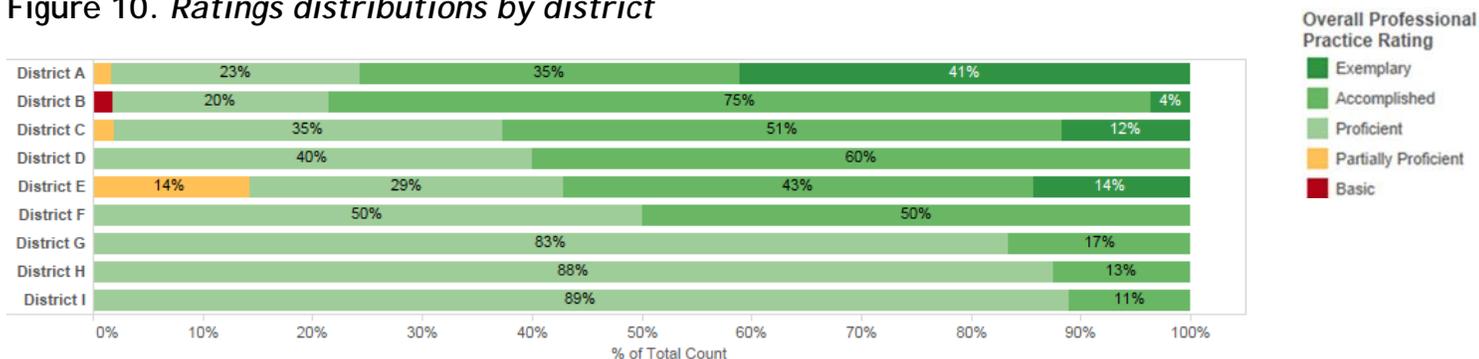
Figure 9. Ratings distributions in 2011-2012, 2012-2013 and 2013-2014



## Section 4. Ratings Distributions by District

CDE received final professional practice ratings for principals from 17 districts. Of those 17 districts, 9 of the districts met the threshold of 5 principals for reporting purposes so the distributions in these 9 districts are illustrated in Figure 10. District names and sample sizes have been removed to protect district confidentiality. There are differences between districts in the percent of principals in each performance category, though the differences are less pronounced than in prior years.

**Figure 10. Ratings distributions by district**



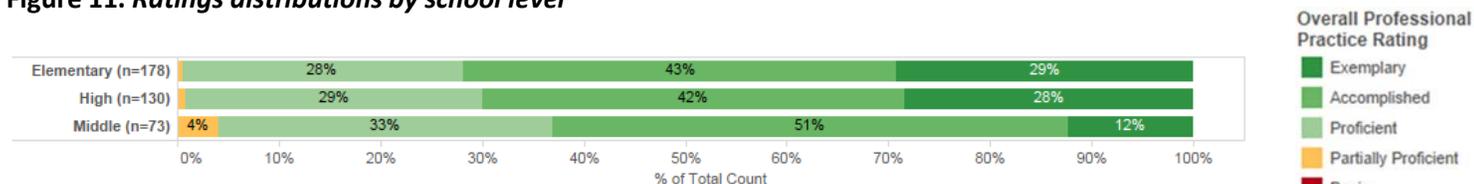
Notes. This stacked bar chart is ordered from highest scores to lowest scores. There are statistically significant group differences by district, meaning that the distribution of overall professional practice ratings varies as a function of the district.

## Section 5. Ratings Distributions by Principal Employment and Demographic Characteristics

This section examines differences in principal performance category by employment and demographic characteristics. Figures 11-17 present overall professional practice ratings based on a range of characteristics (note that all graphs exclude groups with fewer than 5 educators and that some measures contain missing data).

Starting with principals' employment characteristics, Figure 11 displays the differences in ratings between elementary, middle, and high school principals. There are statistically significant differences in principals' overall professional practice ratings based on the school level with elementary school principals receiving higher ratings than middle school principals.

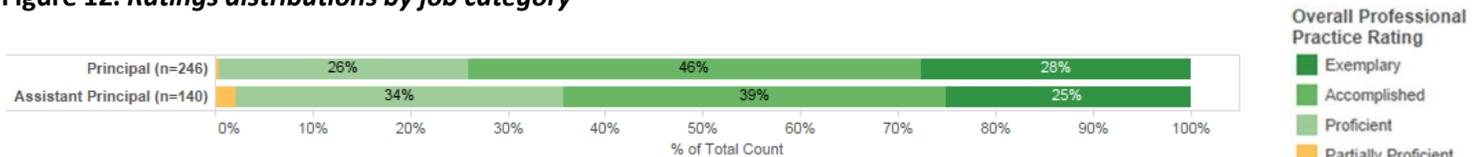
**Figure 11. Ratings distributions by school level**



Notes. This stacked bar chart is ordered from highest average scores to lowest average scores. There are statistically significant group differences by school level, meaning that the distribution of overall ratings varies as a function of the school level.

This is the first year that CDE found no statistically significant group differences by job category (presented in Figure 12). In the first two years of the pilot principals received higher ratings than assistant principals. In this third year principals technically received higher ratings but the differences are not large enough to be statistically significant.

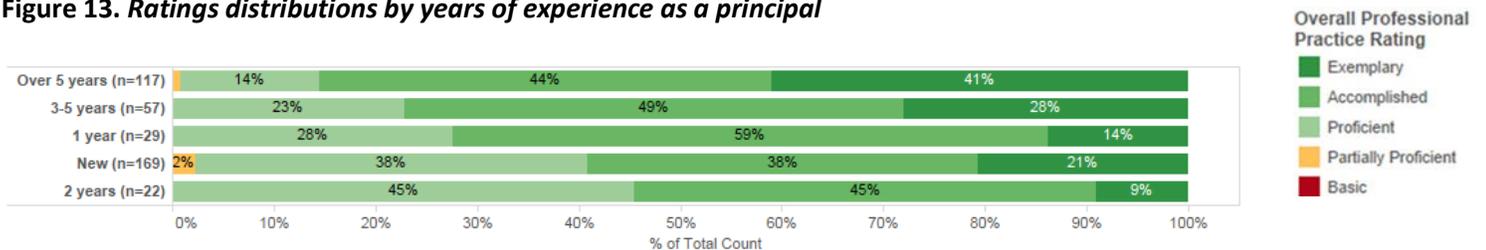
**Figure 12. Ratings distributions by job category**



Notes. This stacked bar chart is ordered from highest average scores to lowest average scores. There are no statistically significant group differences by job category.

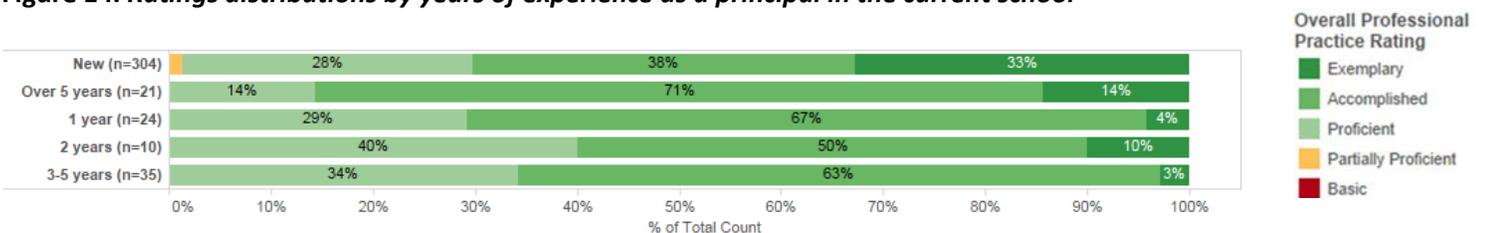
Considering ratings based on principals’ years of experience, school leaders with more years of experience receive higher overall professional practice ratings. Specifically, principals with over five years of experience as a principal receive higher ratings than principals who are new or have just two years of experience (shown in Figure 13). However, there are no statistically significant differences based on the years of experience in the current school (illustrated in Figure 14).

**Figure 13. Ratings distributions by years of experience as a principal**



Notes. This stacked bar chart is ordered from highest average scores to lowest average scores. There are statistically significant group differences by years of experience, meaning that the distribution of overall ratings varies as a function of years of experience.

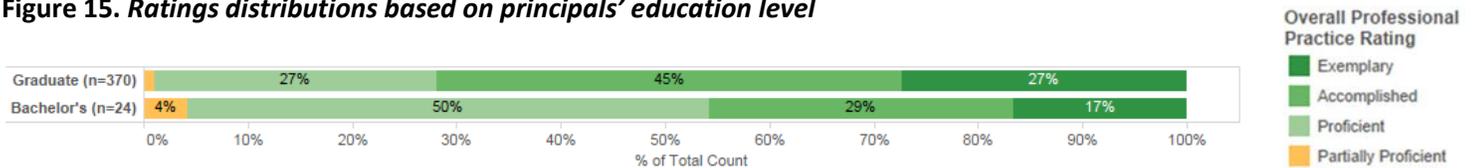
**Figure 14. Ratings distributions by years of experience as a principal in the current school**



Notes. This stacked bar chart is ordered from highest average scores to lowest average scores. There are no statistically significant group differences by years of experience in the current school.

The differences in principals’ overall professional practice ratings based on education level (i.e., degree) are statistically significant. Principals with graduate degrees receive higher ratings than principals with bachelor’s degrees (depicted in Figure 15).

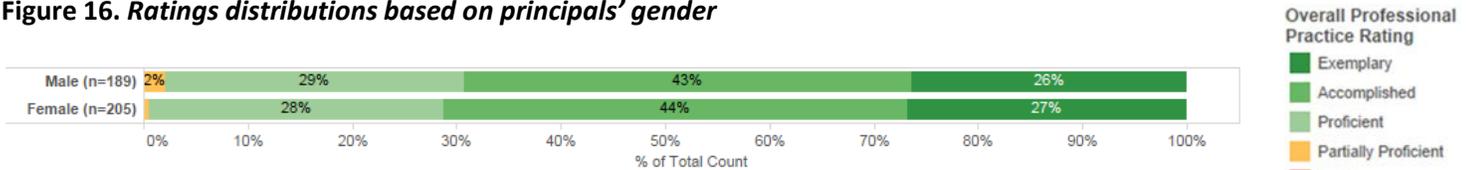
**Figure 15. Ratings distributions based on principals' education level**



Notes. This stacked bar chart is ordered from highest average scores to lowest average scores. There are statistically significant group differences by education level, meaning that the distribution of overall ratings varies as a function of education level.

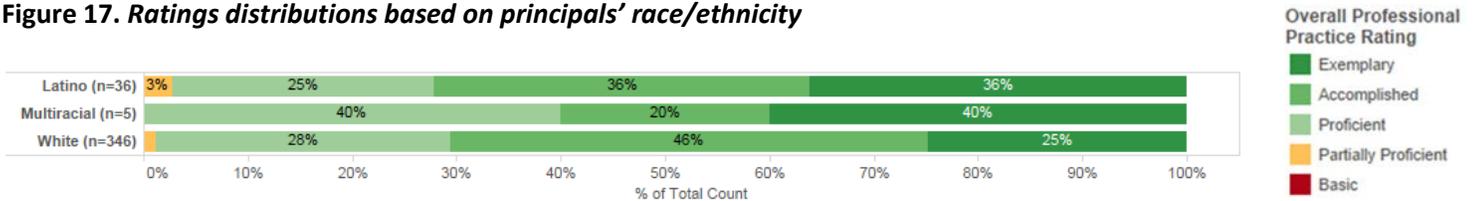
The final group differences examined pertain to principals' gender and race/ethnicity. There are no statistically significant differences in ratings based on principals' gender (see Figure 16) or race/ethnicity (see Figure 17); note that all other racial/ethnic groups had fewer than 5 principals in the group and are therefore not reported.

**Figure 16. Ratings distributions based on principals' gender**



Notes. This stacked bar chart is ordered from highest average scores to lowest average scores. There are no statistically significant group differences by principals' gender.

**Figure 17. Ratings distributions based on principals' race/ethnicity**



Notes. This stacked bar chart is ordered from highest average scores to lowest average scores. There are no statistically significant group differences by principals' race/ethnicity.

## Section 6. Ratings Distributions by Evaluator Employment and Demographic Characteristics

CDE also examined group differences based on characteristics of the evaluators in the pilot of the principal model evaluation system, however there were no statistically significant group differences. The group of 48 known evaluators is comprised of 19 superintendents and 29 principals (many evaluators have undetermined roles because they were not reported by districts). To examine possible group differences, CDE analyzed the ratings assigned based on evaluator role, years of experience (in education and as a principal specifically), education level, gender, and race. No statistically significant group differences were found for any of the groups, perhaps because of the small sample size.

## Section 7. Correlations with Other Measures

The final step in the principal pilot analyses was to examine correlations between principal ratings and other measures of interest, including human resource measures, student demographics, student achievement and growth, and teacher survey responses (note that all correlation coefficients reported are Spearman’s rho, or  $\rho$ )<sup>3</sup>.

As stated previously, principals’ ratings in 2013-2014 have moderate to strong correlations with ratings received in previous years (see Figure 18). This finding indicates that principals who received higher ratings in the 2013-2014 school year also received higher ratings in the two prior school years. Considering the performance of the teachers in their school, there is a moderate correlation between principals’ ratings and the percent of accomplished or exemplary teachers in the school ( $\rho = .35$ ). Principals who received higher ratings tended to employ teachers who also received higher ratings.

**Figure 18. Correlations between principal ratings and student demographics**

	Overall professional practice rating 2011-2012	Overall professional practice rating 2012-2013	% of accomplished or exemplary teachers 2013-2014
Overall professional practice rating 2013-2014	.47**	.66**	.35**
<i>Number of principals</i>	154	298	168

\*\* Correlation is significant at the 0.01 level

CDE also examined correlations between a principal’s overall professional practice ratings and the demographics of students within the school. Similar to findings from 2012-2013, principal ratings are not related to the demographics of the students in the school. The correlations between principal ratings and different measures of student demographics (illustrated in Figure 19) are very weak (ranging from -.07 to .06) and are not statistically significant. These findings indicate that the rubric continues to reflect a common standard that is fair and equally applicable across schools that serve different groups of students.

**Figure 19. Correlations between principal ratings and student demographics**

	% of female students	% of FRL students	% of minority students	% of ELL students	% of SPED students	% of gifted students	Number of students in the school
Overall professional practice rating	-.040	-.073	.057	.023	-.047	.041	.026
<i>Number of principals</i>	390	390	390	390	390	390	390

Notes. FRL denotes “free and reduced-price lunch,” ELL denotes “English-language learners,” and SPED denotes “special education.”

<sup>3</sup> Recall that correlation coefficients indicate the strength of the relationship between two measures; a value of 0 indicates no relationship and a value of 1 indicates a perfect positive relationship (while a value of -1 indicates a perfect negative relationship). General guidelines for interpreting the value of the coefficient are: a correlation coefficient under .3 indicates a weak relationship, .3-.49 indicates a moderate relationship, and .5 and above indicates a strong relationship.

There are weak but statistically significant correlations between principals’ evaluation ratings and student outcome measures, which provide evidence for the validity of the rubric (see Figure 20). Principal professional practice ratings are positively correlated with the state’s school-level accountability measure, specifically the percent of points earned on the School Performance Framework (SPF). The correlation between principals’ overall professional practice ratings and the percent of points earned on the SPF is .15, indicating a statistically significant, albeit weak, relationship between these two measures.

The relationship between principal professional practice ratings and student reading, writing, and math achievement (as measured by the percent of proficient or advanced students on TCAP) is not statistically significant. However, principal ratings are positively correlated with student growth in writing and math as measured by TCAP median growth percentiles (MGPs; MGPs are calculated by taking the median of the student growth percentiles of all of the students in the school). The correlations between overall professional practice ratings and student growth in writing ( $\rho = .14$ ) and between overall ratings and student growth in math ( $\rho = .14$ ) are weak but statistically significant. The

finding that the overall measure of principal practice is aligned with other measures of school success (including school accountability measures and student growth) indicates that the professional practice rubric continues to demonstrate validity.

**Figure 20. Correlations between principal ratings and student achievement and growth**

	SPF % of points earned	TCAP reading % of students proficient or advanced	TCAP writing % of students proficient or advanced	TCAP math % of students proficient or advanced	TCAP reading MGP	TCAP writing MGP	TCAP math MGP
Overall professional practice rating	.15*	.08	.09	.07	.10	.14**	.14**
<i>Number of principals</i>	<i>381</i>	<i>372</i>	<i>372</i>	<i>372</i>	<i>369</i>	<i>369</i>	<i>369</i>

\*\* Correlation is significant at the 0.01 level

\* Correlation is significant at the 0.05 level

Principal ratings are also positively correlated with the percent of favorable responses that teachers gave on two different surveys: the biennial Teaching, Empowering, Leading and Learning (TELL) survey and Colorado’s Teacher Perception Survey (see Figure 21). On the TELL survey teachers respond to a range of questions regarding teaching conditions, including school leadership and the teacher evaluation process. Isolating only the questions pertaining to leadership from the 2013 TELL survey (it is necessary to use 2013 TELL data because the survey is not conducted again until spring of 2015), there are weak but statistically significant correlations between teachers’ survey responses and principals’ overall ratings on the professional practice rubric ( $\rho = .13$ ). There is not a statistically significant relationship between teachers’ survey responses to teacher-evaluation related questions and principals evaluation ratings. On average, principals with higher evaluation ratings lead schools where teachers are more positive about school leadership, however the relationship is not as strong as was found in 2012-2013. The somewhat weaker relationship may be attributed to the fact that the survey was administered in the prior school year, not the same school year in which principals received their evaluation ratings.

There is a similar pattern with Colorado’s Teacher Perception Survey where principals who received higher evaluation ratings from their supervisor also received more positive survey responses from the teachers in their school (with a weak correlation of .28 between these measures). Note that Colorado’s Teacher Perception Survey was designed specifically to align with the Principal Quality Standards, provide actionable information for principals to improve their

practice, and serve as an optional measure for a principal’s evaluation. These findings provide additional validity evidence because ratings from the professional practice rubric are aligned with measures of school success as reported by teachers.

**Figure 21. Correlations between principal professional practice ratings and teacher survey responses**

	TELL school leadership	TELL teacher evaluation	CO Teacher Perception Survey (overall score)
Overall professional practice rating	.13*	.05	.28*
<i>Number of principals</i>	369	369	60

\* Correlation is significant at the 0.05 level

## Summary and Next Steps

Year three findings from the Colorado State Model Evaluation System for Principals indicate that the professional practice rubric captures multiple aspects of school leadership as well as differences in principal practice. Importantly, CDE continues to find evidence of growth in principals’ practice in subsequent school years. The model evaluation system is built on the belief that principals who receive clear and frequent feedback about their leadership will improve their practice and therefore further impact teacher practice and student learning. Preliminary findings indicate that the majority of principals maintained or improved their practice in each subsequent year experiencing the state model system.

Principals receive the highest ratings on the Principal Quality Standard related to school culture and equity leadership, a standard that encompasses principals’ commitment to meeting the needs of a diverse population of students and promotion of the health and skill development of all students. They receive the lowest ratings on the standard related to external development leadership, which includes practices such as contributing to their profession and advocating on behalf of the school.

CDE identified multiple factors that are associated with a principal’s overall professional practice rating, including district, school, and principal-level factors (e.g., years of experience and degree). It is important to note that although these factors are associated with principals’ ratings, it does not indicate that one is causing the other. Interpretations for these findings range from a true reflection of principal skill, evaluator comprehension of the rubric, evidence for additional skills needed as evaluators, a product of the text in the professional practice rubric, and district policies in evaluation processes as well as a range of other plausible explanations. For these reasons, CDE will explore explanations for the findings but also must interpret cautiously and avoid making causal connections.

Using findings from three years of pilot data, CDE continues to find evidence for reliability and validity in the Colorado State Model Evaluation System for Principals. Element and standard ratings are highly correlated and internally cohesive, which provides evidence for reliability and consistency. Additionally, overall evaluation ratings are correlated with other measures of school success including student and teacher measures, which provides evidence for validity (i.e., that the rubric is measuring school leadership and these measures are aligned with other measures of high-quality leadership). The findings also indicate that the rubric represents a common standard that is equally applicable in schools that serve students of different demographics. CDE plans to run additional analyses on the school and principal characteristics that are related to overall professional practice ratings to ensure that the rubric can be fairly applied to principals with differing experiences and in different settings.