



Introduction

Senate Bill 10-191, passed in 2010, restructured the way all licensed personnel in schools are supported and evaluated in Colorado. The ultimate goal is ensuring college and career readiness for all students, which is greatly impacted by the effectiveness of the educators in schools. To support this effort, the Colorado Department of Education (CDE) developed several model systems as an option for districts to use in implementing the new evaluation requirements for educators.

The Colorado State Model Evaluation System was developed to provide consistent and relevant feedback to all educators throughout Colorado. Model systems of evaluation are currently in place for teachers, principals, and educators known collectively as specialized service professionals (SSPs). Currently, there are nine categories of specialized service professionals which use specific rubrics for their annual evaluations:

- Audiologists
- Occupational therapists
- Physical therapists
- School counselors
- School nurses
- School orientation and mobility specialists
- School psychologists
- School social workers
- Speech language pathologists

The Colorado State Model Evaluation System aligns with all requirements set forth in Senate Bill 10-191. By providing a new statewide model of evaluation for all licensed educators, SSPs are able to receive consistent, timely, and actionable feedback to improve their professional practices. This report provides insight on the implementation of the Colorado State Model Evaluation System and initial evaluation scores reported by SSPs and is intended to complement teacher and principal pilot reports developed by CDE. For more information on teacher and principal pilot reports, please visit:

www.cde.state.co.us/educatoreffectiveness/smes-pilot

This report provides several analyses related to the evaluation of speech language pathologists in Colorado. The two major areas pertain to perceptions of their former systems of evaluation compared to the Colorado State Model Evaluation System, and the professional practice ratings resulting from the use of the Colorado State Model Evaluation System. Professional practice ratings contribute to 50 percent of an SSP's overall evaluation rating. Measures of student outcomes comprise the remaining 50 percent, as established by SB 10-191.

This report provides an *initial* look at the use of the Colorado State Model Evaluation System by speech language pathologists, and caution should be exercised when interpreting the results. Specifically, speech language pathologists represent a much smaller population than that of teachers and principals. Generalizing results to the entire speech language pathologist population based on the results of this small sample of speech language pathologists is not

Key Findings

Many of the speech language pathologists had **positive perceptions** of the State Model Evaluation System and noted the use of student outcomes to inform the final evaluation rating.

More than 98 percent of speech language pathologists were deemed proficient or higher, representing the three areas of proficiency on the five-point scale (basic, partially proficient, proficient, accomplished, and exemplary).

Speech language pathologists performed the best on **Standard 4** (Reflect on Practice). **Standard 5** (Leadership) was the standard with the most speech language pathologists rated below the level of proficiency.

There is evidence that the standards are **reliable measurements** of speech language pathologists' practice. The standards are **strongly correlated** with the overall professional practice rating, suggesting that the rubric captures multiple related measures of effectiveness.



advisable both because of the small sample size as well as it being the first year of implementation. These systems take time to adjust to and implement with fidelity. Additionally, the implementation of the Colorado State Model Evaluation System may have been conducted differently across districts and Boards of Cooperative Educational Services (BOCES) sites. Thus, speech language pathologists may have been evaluated very differently during the initial implementation, depending on where they were located and how they were employed.

Specialized Service Professionals, Speech Language Pathologists and SB 10-191

SSPs are educational professionals who ensure that diverse student populations have equitable access to academic instruction and participation in school-related activities. In the 2013-14 academic year, 5,295 SSPs were employed in the state of Colorado. In accordance with the requirements set forth in SB 10-191, all educators should receive sufficient feedback, support and opportunities for professional growth, to ensure each child has access to great educators.

In their recommendations to implement Senate Bill 10-191, the State Council for Educator Effectiveness identified the nine categories of specialized service professionals, and with help from nine working groups of these professionals, outlined high quality standards and elements that guided the creation of the Colorado State Model Evaluation System. All nine groups of specialized service professionals work from a common set of standards and elements approved by the State Board of Education, but each category has unique professional practices outlining the specific role and duties of each professional group. Recommendations from the State Council for Educator Effectiveness on the evaluation of SSPs can be found in the following report: www.cde.state.co.us/educatoreffectiveness/sceesspreportmay2013.

The speech language pathologist is generally considered to be the closest SSP to a traditional classroom teacher. They typically provide direct services to students rather than supporting professional programs which are in turn designed to support students. Depending on the needs of the school or district, the speech language pathologist may be school or district based, and could report to different evaluators as needed. Speech language pathologists represent the second largest group of SSPs. There are more than 1,150 providing student services in Colorado. This report contains 122 professional practice ratings from speech language pathologists.

The following definition is intended to give an overview of what an effective speech language pathologist does to meet the Colorado educator Quality Standards and their related elements. Definitions for all SSPs have been drawn from the Colorado State Model Educator Evaluation System User's Guide: www.cde.state.co.us/educatoreffectiveness/usersguide

Definition of an Effective Speech Language Pathologist

Effective speech language pathologists are vital members of the education team. They are properly credentialed and demonstrate knowledge of current research on effective, specialized speech language instruction to meet the developmental, communicative and academic needs of students. Effective speech language pathologists strive to support growth and development in the least restrictive environment, close achievement gaps and prepare diverse student populations for postsecondary and workforce success. Effective speech language pathologists evaluate students and design instruction that is aligned to the Colorado academic standards, advances students' concept and content knowledge and skills and help to support student growth. Speech language pathologists have a deep understanding of the interconnectedness of the home, school and community and collaborate with all members of the educational team to establish safe, inclusive and respectful learning environments. Through reflection, advocacy and leadership, they enhance the academic achievement, communicative and social development of their students.



Analyses Background

The research presented in this report uses two datasets to produce the overall findings. The first dataset consists of responses to baseline and feedback surveys issued to the pilot districts and BOCES that were in the process of transitioning to the Colorado State Model Evaluation System. The second dataset consists of 122 finalized professional practice ratings from the 2013-14 academic year.

Baseline and Feedback Surveys

Nineteen districts piloted the SSP Colorado State Model Evaluation System. From these 19 districts, 15 piloted the SSP rubric for speech language pathologists. Speech language pathologists at these districts were sent an e-mail containing a link to complete the perception surveys. Many of the questions were likert style and asked to what degree the respondent agreed with statements pertaining to their previous and current evaluation systems. Other questions consisted of multiple choice and open ended responses.

The baseline survey data was collected between October 2013 and January 2014. The follow-up feedback survey data was collected between May 2014 and June 2014. All data was collected via online survey. The surveys asked the respondents questions pertaining to their perceptions of their former evaluation system and their initial impressions of the Colorado State Model Evaluation System. The survey was issued anonymously; perception data cannot be linked to district information, any type of demographic feature, or the professional practice ratings.

Professional Practices

This dataset consists of finalized professional practices data from the 2013-14 academic year. There were 122 speech language pathologists from 15 district sites who provided final professional practice ratings. Each was evaluated according to a specific speech language pathologist rubric and a professional practice rating was developed. The primary goal of these analyses was to draw out overall, standard, and element level professional practice ratings and to describe the reliability and correlations associated with each.

Percent of Positive Responses Given by SSPs in Baseline and Feedback Surveys

Before reviewing speech language pathologist-specific perceptions, this report introduces a brief analysis of the overall perceptions of all SSPs. Figure 1 displays aggregated SSP perception data. This table displays the percent of positive responses on each survey item. The percent positive responses on each item is higher on the feedback survey than the baseline survey, suggesting that the Colorado State Model Evaluation System is perceived as an improved tool to guide professional growth and improve performance (note that responses of “agree” and “strongly agree” are coded as positive responses; in contrast to “neutral”, “disagree”, and “strongly disagree”).

Across all SSPs, the area with the largest gain between the baseline and feedback surveys pertained to the evaluation system’s use of student outcomes to inform the final rating. This is highlighted as many of the former SSP evaluation systems did not formally consider student outcomes in the evaluation process. The feedback survey item with the most positive responses was regarding the evaluation system’s ability to identify areas of strength. The areas with the least positive responses pertain to the confidence that development of the Colorado State Model Evaluation System was based on current scientifically sound research and the ability of the new system to provide an accurate assessment of performance. However, these areas still had more positive responses on the feedback survey than on the baseline survey.

In the overall population of SSPs, the survey item with the greatest variance in the amount of change of positive responses pertained to the fairness of the evaluation system (standard deviation = 0.27), suggesting that this item had the largest range in perceptions across the nine different types of SSPs.



It is important to note the distinct differences associated with the specific groups of SSPs and what their unique perceptions are of their former and current evaluation systems. The specifics regarding these differences can be found in each individual SSP report at www.cde.state.co.us/educatoreffectiveness/smes-pilot. The unique differences between groups of SSPs can be identified in each of these reports.

When comparing speech language pathologists to the larger group of SSPs, several similarities are apparent. This is largely attributable to the fact that nearly one-quarter of the SSP sample is comprised of speech language pathologists, making them the largest sub-group represented in the overall sample. When comparing the change in percent positive responses of the SSP sample to the speech language pathologist sample, the two survey items with the greatest differences pertained to the evaluation system setting high standards and encompassing all aspects of quality service delivery. Additional information specific to speech language pathologists' perceptions are found on the following page.

Figure 1. SSP perceptions of their former evaluation system and the Colorado State Model Evaluation System

Survey Question	Baseline Fall 2013 (N = 268)	Feedback Spring 2014 (N = 202)	Change in Percent Positive Response
	The former evaluation system...	The State Model Evaluation System...	
Identifies areas that need improvement.	55.5%	78.7%	+23.2%
Identifies areas of strength.	67.3%	79.6%	+12.3%
Designed to guide professional growth.	46.3%	77.7%	+31.4%
Sets high standards for the person being evaluated.	34.1%	69.7%	+35.6%
Serves as a basis for improving service delivery and planning.	27.3%	60.4%	+33.1%
Provides actionable feedback to the person being evaluated.	31.8%	57.4%	+25.6%
Documents changes in professional practice over time.	16.8%	55.9%	+39.1%
Supports the improvement of service delivery and program development.	27.0%	57.9%	+31.0%
Is based on current scientifically sound research.	10.9%	34.3%	+23.5%
Results in improved student outcomes.	20.4%	40.1%	+19.7%
Provides an accurate assessment of my performance.	31.8%	37.3%	+5.5%
Encompassed all aspects of quality service delivery.	21.7%	40.1%	+18.4%
Provided a fair assessment of professional practices.	30.6%	45.3%	+14.7%
Provided timely feedback to the person being evaluated.	36.3%	51.5%	+15.2%
Used student outcomes to inform my final rating.	11.9%	55.2%	+43.3%
Was useful to me in making decisions about service delivery.	25.0%	50.7%	+25.7%
Influenced my practice as a specialized service professional.	32.5%	63.7%	+31.2%
I understand what information was used in my evaluation.	58.6%	65.8%	+7.3%

Note. The heavy black line in the middle of the table is provided to distinguish items that appear in the 2012-13 Teacher System Pilot Report—Baseline and Feedback Survey Data. The items above this line can also be found on the teacher survey data report (for reference), while those below the line will not be found on that report, but are important to the SSP population. The 2012-13 Teacher System Pilot Report—Baseline and Feedback Survey Data can be found here:

<http://www.cde.state.co.us/educatoreffectiveness/teacherpilotsurveydata12-13>



Speech language pathologist

There are more than 1150 speech language pathologists in the Colorado K-12 system. Since 15 districts and school sites participated in the evaluation system for speech language pathologists, the sample size is rather small. Seventy-four speech language pathologists responded to the baseline survey and 51 responded to the feedback survey. As such, broader generalizations about the perceptions of speech language pathologists should be avoided.

The area with the greatest differences in the percent of positive responses pertain to the Colorado State Model Evaluation System’s use of student outcomes to inform final evaluation ratings (a 37.8 percent increase), while the change in percent positive responses changed the least on the survey item pertaining to the evaluation system’s ability to encompass all aspects of quality service delivery (a 2.4 percent increase). The item on the feedback survey with the greatest number of positive responses pertained to the Colorado State Model Evaluation System’s identification of areas of strength.

Figure 2. Speech language pathologists’ perceptions of their former evaluation system and the Colorado State Model Evaluation System

Survey Question	Baseline Fall 2013 (N = 74) The former evaluation system...	Feedback Spring 2014 (N = 51) The State Model Evaluation System...	Change in Percent Positive Response
Identifies areas that need improvement.	49.3%	76.5%	+27.2%
Identifies areas of strength.	63.0%	82.4%	+19.4%
Designed to guide professional growth.	44.6%	70.6%	+26.0%
Sets high standards for the person being evaluated.	39.7%	59.2%	+19.5%
Serves as a basis for improving service delivery and planning.	26.0%	51.0%	+25.0%
Provides actionable feedback to the person being evaluated.	26.0%	45.1%	+19.1%
Documents changes in professional practice over time.	14.9%	47.1%	+32.2%
Supports the improvement of service delivery and program development.	25.7%	49.0%	+23.3%
Is based on current scientifically sound research.	9.5%	25.5%	+16.0%
Results in improved student outcomes.	21.6%	37.3%	+15.7%
Provides an accurate assessment of my performance.	28.4%	35.3%	+6.9%
Encompassed all aspects of quality service delivery.	27.0%	29.4%	+2.4%
Provided a fair assessment of professional practices.	28.4%	37.3%	+8.9%
Provided timely feedback to the person being evaluated.	41.9%	49.0%	+7.1%
Used student outcomes to inform my final rating.	12.2%	50.0%	+37.8%
Was useful to me in making decisions about service delivery.	16.2%	40.0%	+23.8%
Influenced my practice as a specialized service professional.	23.0%	52.9%	+29.9%
I understand what information was used in my evaluation.	55.4%	60.8%	+5.4%



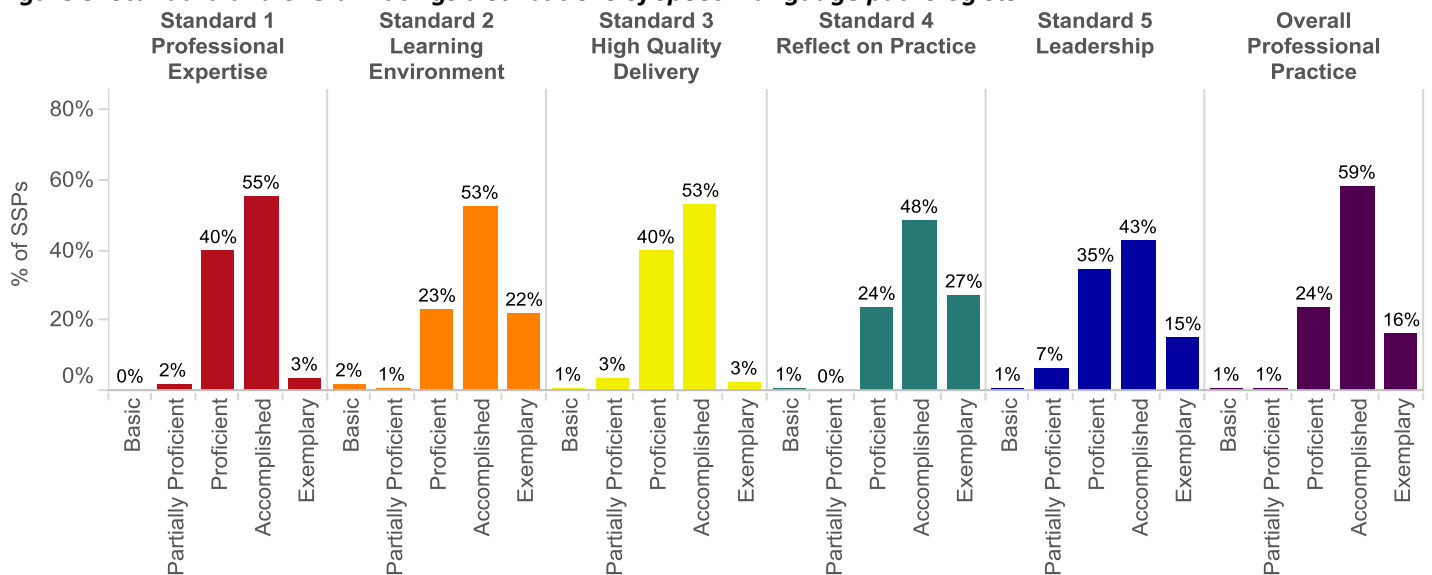
Professional Practices Distributions of Speech Language Pathologists

Of the 122 speech language pathologists in the 15 districts that provided professional practice rating information, more than 98 percent were evaluated as proficient or higher on the overall professional practice rating. Figure 3 depicts the professional practice ratings of speech language pathologists on each of the standards. Standard 4 (Reflect on Practice) had approximately 99 percent of speech language pathologists evaluated as proficient or higher. On Standard 5 (Leadership), however, 8 percent of speech language pathologists did not achieve proficiency.

The following sections will also include descriptions of the correlations¹ and internal consistency² between and within the standards. A correlation is a measurement of how two variables, such as standards, change together. Internal consistency, on the other hand, is a measurement that describes how well multiple measures of related constructs score together. These two concepts, correlations and internal consistency, are important to this analysis since the Colorado State Model Evaluation System has been designed to measure related, but unique, aspects of educator effectiveness.

All standards had a moderate to strong correlation with one another ($0.46 < \rho < 0.66$) and were strongly correlated with the overall proficiency rating ($0.63 < \rho < 0.72$). The reliability of the standard ratings was high (Cronbach's $\alpha = 0.87$), and the ratings within each standard range between an acceptable to high degree of internal consistency ($0.60 < \alpha < 0.89$).

Figure 3. Standard and overall ratings distributions of speech language pathologists



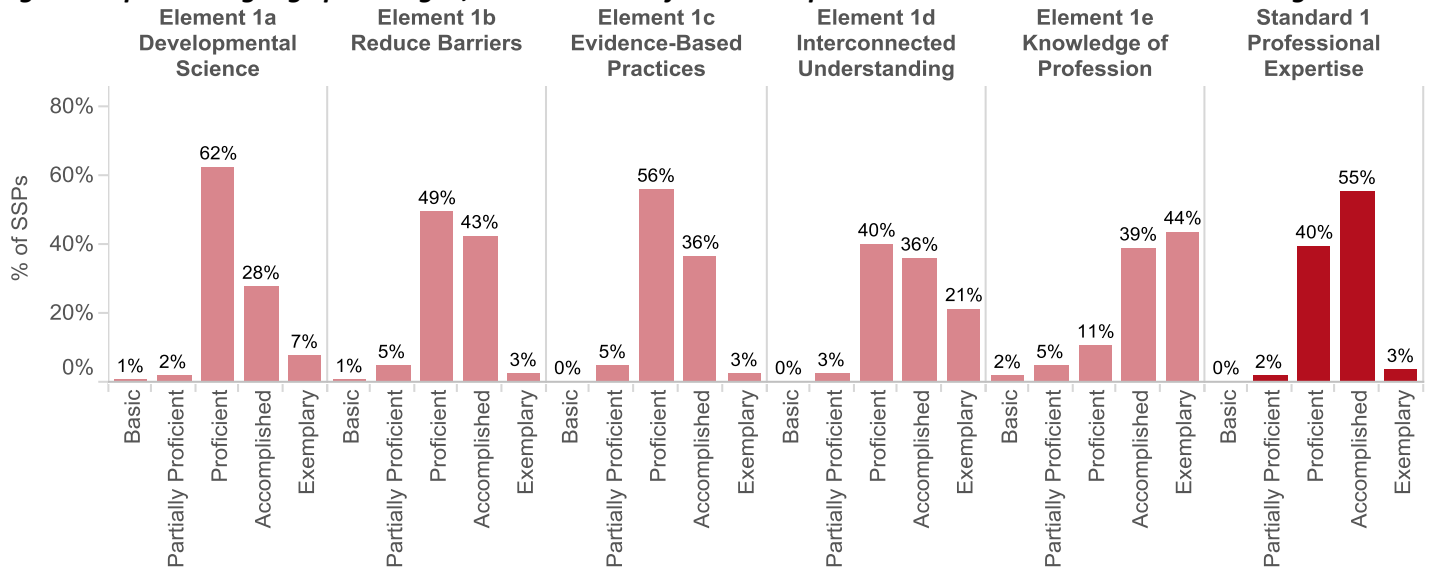
Note. Percentages may not add to 100 percent due to rounding.

¹ Correlations 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 (a value of -1 indicates a perfect negative relationship). General guidelines for interpreting this value are: a correlation under 0.30 indicates a weak relationship, 0.30-0.49 indicates a moderate relationship, and a 0.50 and above indicates a strong relationship.

² Internal consistency is a measure of reliability. This report uses Cronbach's alpha (α) as a measurement of internal consistency for professional practice ratings. Typically, an item with an α score less than 0.50 is considered to have poor internal consistency, an item with an α between 0.50 and 0.69 is said to be acceptably reliable, and an item with an α of 0.70 and above has a high degree of internal consistency.

When drilling down to Standard 1 (Professional Expertise), speech language pathologists in the pilot displayed a high degree of internal consistency (Cronbach’s $\alpha = 0.79$). The correlation between elements in Standard 1 ranged between weak and strong ($0.29 < \rho < 0.55$), while the elements were each strongly correlated with the overall standard ($0.59 < \rho < 0.72$).

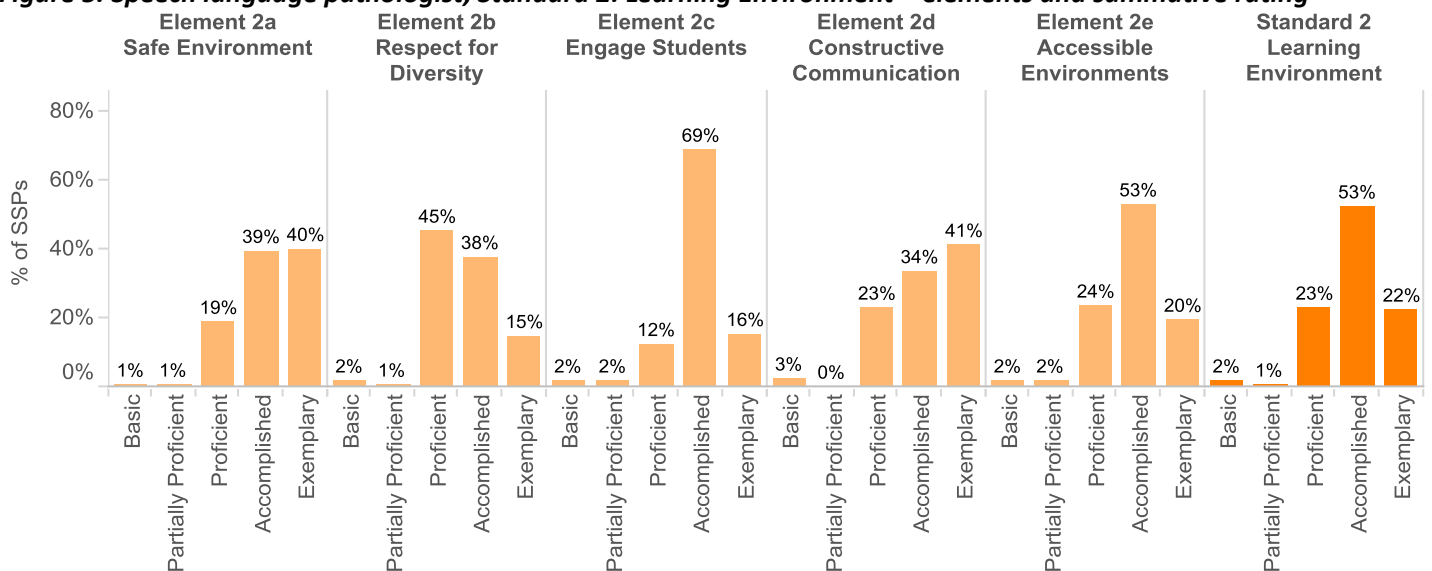
Figure 4. Speech language pathologist, Standard 1: Professional Expertise – elements and summative rating



Note. Percentages may not add to 100 percent due to rounding.

For speech language pathologists in the pilot, Standard 2 (Establish Environment) displayed a high degree of internal consistency (Cronbach’s $\alpha = 0.89$). The correlation between elements in Standard 2 ranged between moderate and strong ($0.46 < \rho < 0.66$), while the elements were each strongly correlated with the overall standard ($0.69 < \rho < 0.80$).

Figure 5. Speech language pathologist, Standard 2: Learning Environment – elements and summative rating

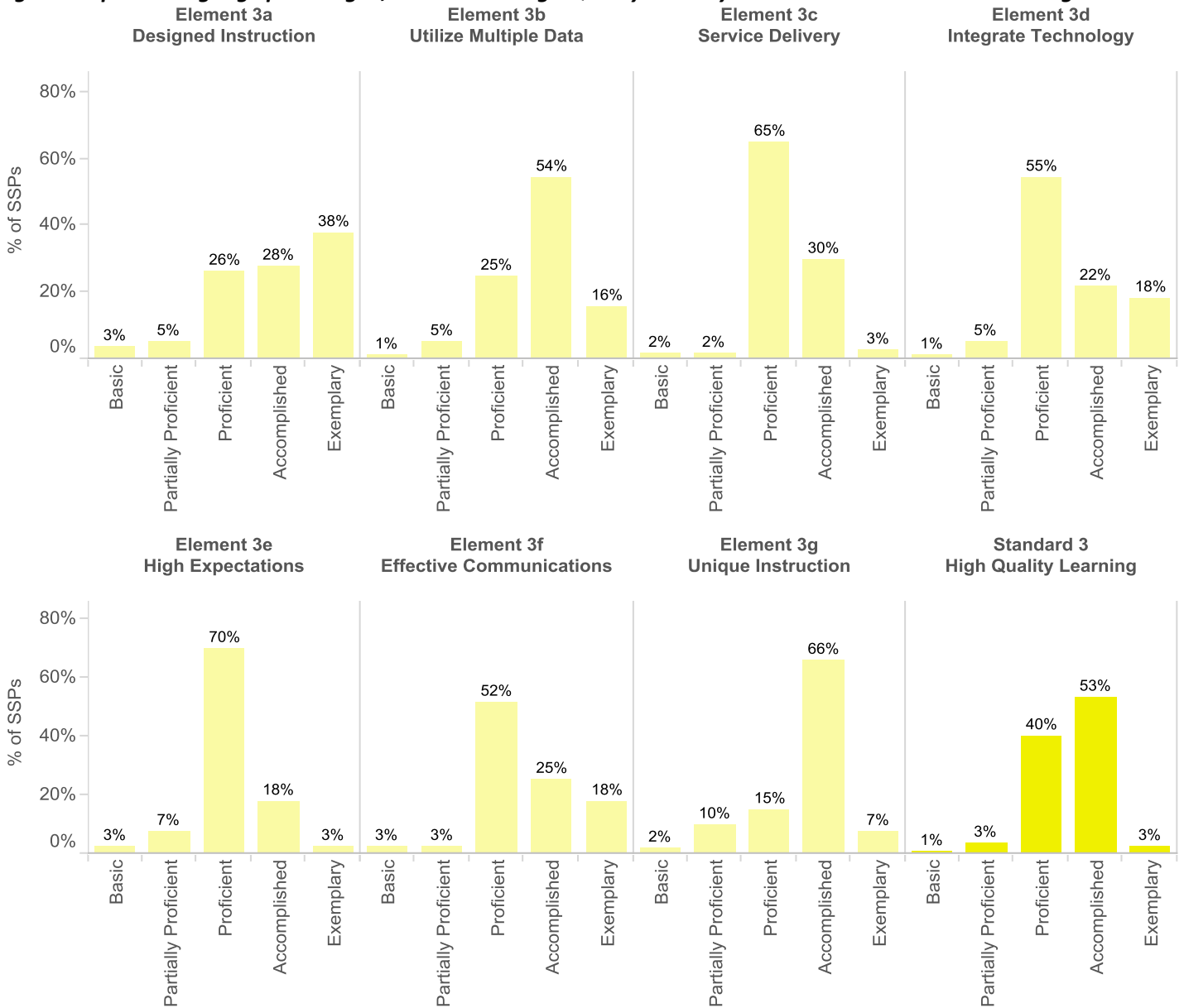


Note. Percentages may not add to 100 percent due to rounding.



Standard 3 (High Quality Delivery) displayed a high degree of internal consistency (Cronbach’s $\alpha = 0.79$). The correlation between elements in Standard 3 ranged between weak and strong ($0.18 < \rho < 0.53$), while the elements were each moderately to strongly correlated with the overall standard ($0.43 < \rho < 0.69$).

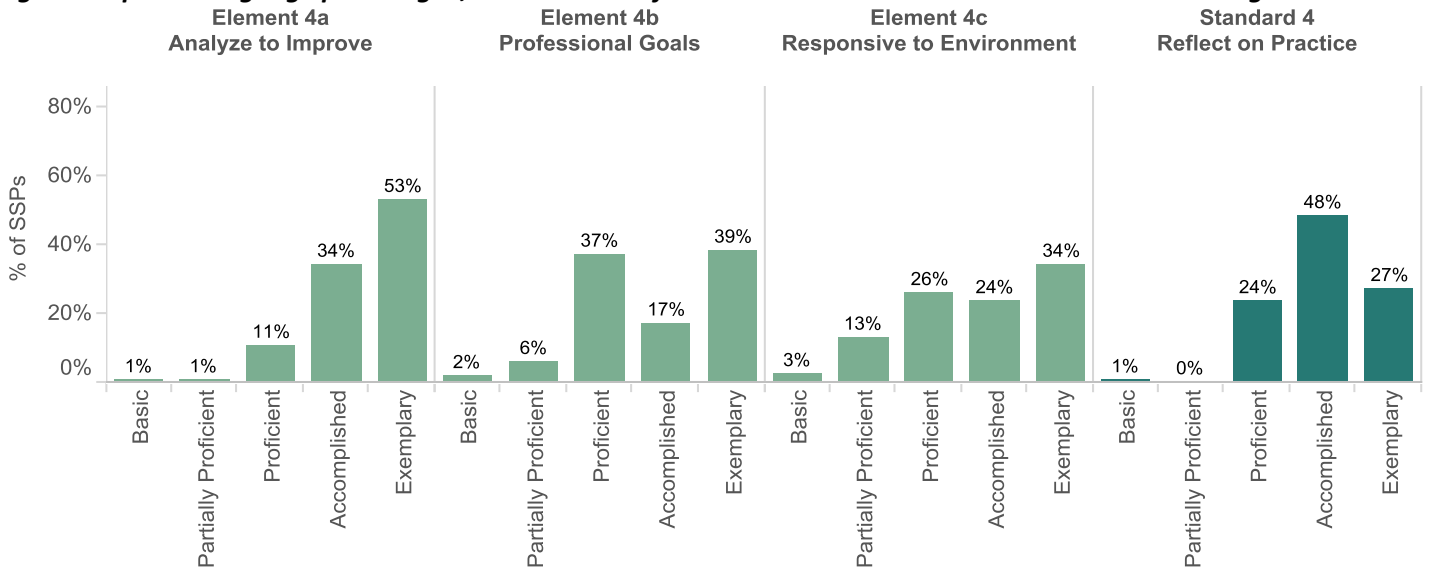
Figure 6. Speech language pathologist, Standard 3: High Quality Delivery – elements and summative rating



Note. Percentages may not add to 100 percent due to rounding.

For speech language pathologists in the pilot, Standard 4 (Reflect on Practice) displayed an acceptable degree of internal consistency (Cronbach’s $\alpha = 0.60$). The correlation between elements in Standard 4 ranged between weak and strong ($0.24 < \rho < 0.61$), while the elements were each strongly correlated with the overall standard ($0.67 < \rho < 0.74$).

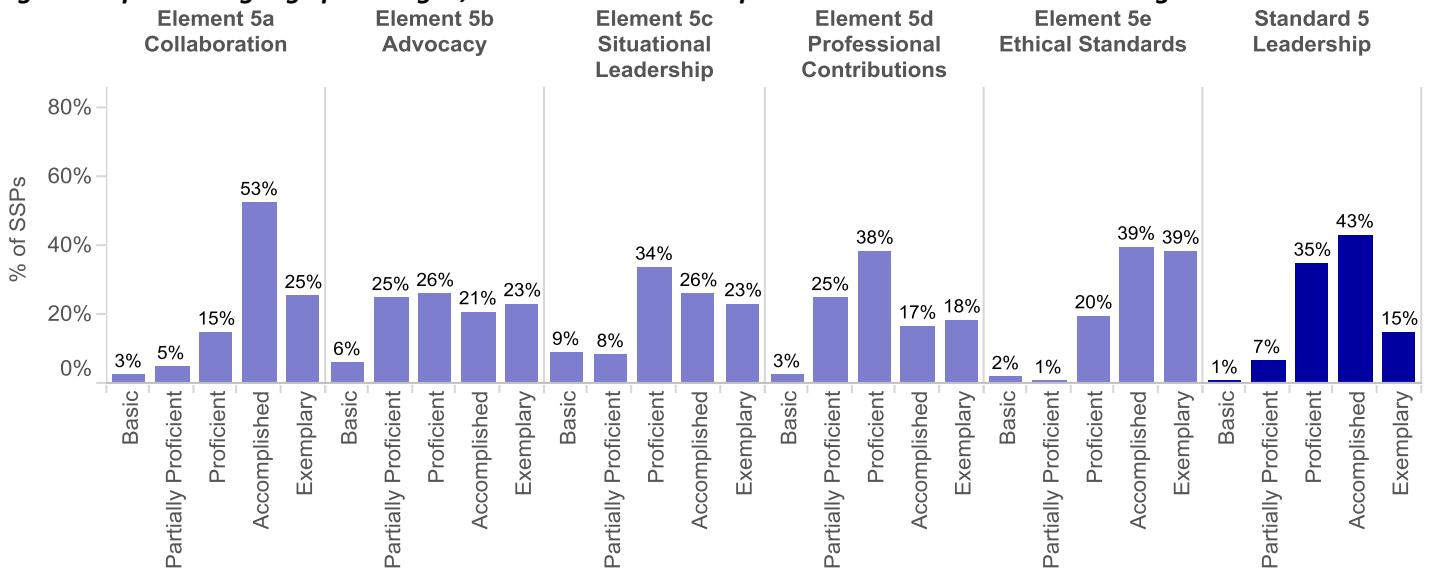
Figure 7. Speech language pathologist, Standard 4: Reflect on Practice – elements and summative rating



Note. Percentages may not add to 100 percent due to rounding.

For speech language pathologists in the pilot, Standard 5 (Leadership) displayed a high degree of internal consistency (Cronbach’s $\alpha = 0.79$). The correlation between elements in Standard 5 ranged between weak and strong ($0.17 < \rho < 0.66$), while the elements were each moderately to strongly correlated with the overall standard ($0.44 < \rho < 0.81$).

Figure 8. Speech language pathologist, Standard 5: Leadership – elements and summative rating



Note. Percentages may not add to 100 percent due to rounding.



Conclusion

In developing and implementing the Colorado State Model Evaluation System, it has been noted that speech language pathologists are unique educational professionals that have diverse perceptions of evaluation systems and have specific evaluation needs. The implementation of the Colorado State Model Evaluation System has largely been positively received by speech language pathologists. As a whole, speech language pathologists had the greatest change in the percent positive responses on the survey item pertaining to the use of student outcomes to inform the final evaluation rating. Nearly all speech language pathologists in the pilot were rated proficient or higher on the overall professional practice rating. Each of the five standards, however, varied in the level of proficiency. This variation occurred across as well as within each of the standards.

This report suggests that there is a range of reliability associated with the standards and with overall professional practice ratings. For speech language pathologists in the pilot, all overall and standard level reliability indicators displayed an acceptable to high degree of reliability. Ratings also correlated with one another across and within each standard, suggesting that the Colorado State Model Evaluation System does capture different but related aspects of professional practices of speech language pathologists. Further research into these areas could yield additional insight on the use of the Colorado State Model Evaluation System by speech language pathologists. The small sample sizes associated with this population implies that generalizable conclusions about the perceptions and reliability should not be drawn from this report. The preliminary results do suggest that the Colorado State Model Evaluation System can be validated as an effective measurement tool for improving professional practices. The validation process would produce greater insight on the use of the evaluation system as a reliable, valid, and fair instrument for educator evaluation. As the Colorado State Model Evaluation System continues to be implemented and additional data is collected, supplementary analyses may be performed to better understand the use of this system among speech language pathologists.