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Overview of Program Monitoring

Program monitoring is the systematic and continual observation and recording of key program aspects (Malone et al., 2014). The data gathered through program monitoring is used to appraise whether a program is on track to meet its expected outcomes. Frequent, intermittent assessment of program implementation and outcomes provides leaders and program administrators with timely information and performance feedback that can guide programmatic decisions. For many SSD programs, including those for which evaluation is required by MSIP-5, monitoring of activities, action plans, and key outcomes represents an efficient and actionable approach that is preferable to less frequent, more in-depth evaluation. Effective program monitoring is contingent upon a well-developed program plan that clearly defines program mission, resources and activities, goals and objectives, and expected outcomes. As one component of program monitoring, it is recommended that some form of voice of customer (VOC) feedback be solicited at minimum annually. When monitoring indicates that a program is consistently failing to meet expectations, an in-depth evaluation or some other corrective action may be recommended.

High quality program monitoring requires the identification and specification of outcomes, indicators, measures, benchmarks, baseline, and targets. The following definitions of these components are adapted from Malone, Mark, & Narayan (2014).

*Outcome:* An expected result in an individual’s behavior, knowledge, or skills, or the change in practices or policies attained as a result of participation in an activity or program. In other words, what is expected to happen as a result of a program.

*Indicator:* An observable and measurable behavior or finding used to understand information about complex systems. Indicators are used to show whether progress is being made and the extent to which outcomes are being achieved.

*Measure:* An instrument, device, or method that provides information, often quantifiable data, on an outcome/indicator. A measure, or metric, provides data that allows for judgments regarding the progress and goal achievement.

*Benchmark:* A standard against which a program’s results and progress can be compared. Often performance by similar groups, programs, or organizations can serve as a benchmark.

*Baseline:* The level of performance indicated by a measure prior to the implementation of a program or intervention. Baseline is used as one reference point for measuring future progress.

*Target:* A desired value or level of a measure at a specified time in the future. The target is a measurable result being sought. Actual progress is measured against the target to determine achievement of program outcomes.

These abbreviated reports review performance data from the previous fiscal year (as well as the current fiscal year, if available/applicable) for programs designated by DESE and/or the District as requiring at minimum a biennial evaluation. Monitoring results for all programs will be provided to the Board of Education across several separate reports submitted throughout the year.
Professional Development

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Summary and Recommendations

The fifteen action plans that have been completed resulted in foundational improvements to the District’s approach to supporting staff and students. One action plan yet to be completed will be maintained.

The approach taken in the current evaluation is to examine Professional Development program outcomes using the framework of Guskey’s five levels of professional learning evaluation model.

The 90% target for each workshop evaluation survey item has met or exceeded 90% each of the last 4 years.

The percentage of new teachers who reported that they both gained knowledge and planned to apply it following New Teacher Academy across professional learning experiences was 77%, slightly below the 80% target.

District-wide survey results reflecting perceptions of the adequacy of SSD’s professional development paint a mixed picture, with some survey groups meeting (ambitious) targets and others falling below them. Paraprofessionals working in partner districts and staff who fall in the “Other” survey group (e.g., administrators, support staff, operations staff, etc.) tend to report somewhat less positive views on SSD professional learning than do teachers. Notably, while engagement survey item agreement targets were not met, SSD staff results substantially exceeded those of a comparative group available via a 2017-18 benchmarking study that included eight districts.

Educator Evaluation System results indicate that, on average, teachers more in need of improvement in specific competency areas experienced slightly greater gains in “growth indicator” ratings from baseline to follow-up than occurred the year prior. The new practice of awarding micro-credentials / “badges” to those who complete professional learning strands and demonstrate competency should provide another lens from which to evaluate the acquisition and application of skills among staff in the future. Micro-credentials / badges will provide educators with competency-based recognition for the skills that they learn and apply through the submission of evidence evaluated by course instructors (Badge Facilitators).

Adoption of the FastBridge academic assessment system provides new options for assessing reading and math growth among students in partner districts. FastBridge has been phased in over fiscal years 2018 and 2019. Student growth over fall semester 2017-18 (based on data from students in 12 districts) fell between provisional targets for “approaching expectations” and “meeting expectations,” and exceeded the national 50th percentile for growth in both reading and math. Assessed growth rates among a more complete sample of students in fall of 2018-19 have been lower, falling below the 50th percentile. Full implementation and refinement of the system in 2018-19 should allow for more in-depth and confident analysis of student growth trends in the context of professional learning.
New action plans to address opportunities for improvement appear below. Note that, in addition to these plans, multiple other ongoing Professional Development improvement efforts are coordinated through the District strategic plan, a District project team, and the internal department improvement plan.

**New Action Plans Required as a Result of Evaluation Findings: (previously-developed action plans will remain in effect unless identified as complete)**

1. Increase the number of professional learning courses and/or sessions that incorporate the use of micro-credentialing as a system of feedback to participants to promote and assess the application of new teacher knowledge and skills. (Objectives 2.1, 4.1)

   **Anticipated Date of Completion: May 2020**

2. Increase the use of blended learning approaches to differentiate, personalize, and align support for educators based on educator and student learning needs. (Objectives 1.1, 2.1)

   **Anticipated Date of Completion: May 2020**

**Brief Program Description**

The Professional Development program is intended to ensure that educators, operational and administrative staff receive ongoing instruction on evidence-based practices aligned to District and partner district improvement plans. The program conducts a wide array of presentations, workshops, courses, and coaching activities, all designed to improve the individual knowledge and performance of SSD and partner district staff. These activities are based on customer and stakeholder needs, research and publications, and leadership requests. Development activities are monitored and assessed, and the results are used to improve future activities using Plan-Do-Study-Act (PDSA).

The Planning and Development department has historically and still does continue to make the connection between professional learning and student learning. To that end, our theory of change includes the five components of Thomas Guskey’s Professional Learning Evaluation Model: (1) When staff engage meaningfully in their learning, (2) their knowledge increases, (3) the district organizes its resources and supports the staff to (4) develop and use their instructional skills and, therefore, (5) student learning increases.

![Guskey Model Diagram](image)

The Professional Development program evaluation is designed to address each of Guskey’s five levels of evaluation:

1. Provide professional learning that meets the needs of and is satisfactory to SSD staff (Guskey Evaluation Level 1: Participant’s Reactions).
2. Staff will build knowledge and skills through their participation in SSD professional learning activities (Guskey Evaluation Level 2: Participant’s Learning).
3. Professional learning will be well integrated with other District processes and have a positive impact on the organization (Guskey Evaluation Level 3: Organization Support and Change).

Guskey, 2000
4. Professional learning will generalize to the classroom as participants effectively apply new knowledge and skills they obtain (Guskey Evaluation Level 4: Participants’ Use of New Knowledge and Skills).

5. Professional development will positively impact student learning and growth (Guskey Evaluation Level 5: Student Learning Outcomes).

A biennial report of the progress and status of the Professional Development program is required under Board Policy IM. The most recent full/comprehensive evaluation of this program was approved by the Board on 9/27/2016. Please consult the Professional Development Program Plan for a detailed description of this program and its intended outcomes. Program Plans are available through the SSD Department of Evaluation and Research.

Action Plans From Most Recent Evaluation/Monitoring Report(s)

Action Plan 1: Continue to implement the milestones and action steps under Strategy 5.1.2 of the 2016-17 SSD CSIP (Sustain and improve processes to review student level assessment data, monitor progress and make adjustments to instruction based on results), and consider additional opportunities to provide support to both administrators and data team leaders regarding effective data team practices.

Status of Action Plan: Complete. The Data Team Continuum has been replaced with a formative assessment. Data Team Cohorts have been designed specifically for administrators. The Data Team Leadership Committee (DataTLC) continues to analyze the survey that data teams complete after each data team meeting (Formative assessment referenced in the Q4 FY 2017 Notes). Planning and Development's reorganization has a Focus Team for Measurement and Assessment. DataTLC will ensure District alignment to the work of the Measurement and Assessment Coaches, Strategy 1.10, and Data Team Cohorts. FastBridge rollout continues, and work is being done to support another Administrator Data Team Cohort next year.

Action Plan 2: Continue to enhance professional development for paraprofessionals.

Status of Action Plan: Complete. Each Technical Assistance Team (TAT) will develop a cadre of professional developers that will increase expertise in this area. Learning modules have been developed. We are also exploring online training. Planning & Development will partner to integrate professional learning needs for the program and for all paraprofessionals. A P&D Facilitator has joined Strategy Team 2.2 to support the development of a Paraprofessional-to-Special Education Teacher Program. Human Resources is a partner in the designing and co-presenting of New Paraprofessional training. Members of the Planning and Development paraprofessional professional learning team met with teacher advisory to review the professional learning plan and professional learning resources on the Planning & Development website.

Action Plan 3: Develop an inclusive education professional development strand.

Status of Action Plan: Complete. An Inclusion Rollout Committee has been deployed as an offshoot of the Inclusive Education Stakeholders Committee. This committee held two sessions of training in 2016-17. Using PDSA, they made recommendations to adjust the training and the new format was deployed for 2017-18. The Rollout Committee is initially focusing its efforts to develop the foundation skills of Planning & Development to be able to provide inclusive education training that is requested from schools. The Behavior Prevention and Intervention Focus Team has also embedded inclusion and inclusive ed strategies within its professional learning in multi-tiered systems of support. We are continuing to integrate professional learning on this topic during the national Inclusive Schools Week in December. The last two years, we have had a national speaker present on the benefits of inclusive schools for post school positive outcomes. We have revised the inclusion survey, integrated its use into other professional learning, and surveyed the Planning and Development staff on how they integrate inclusive best practices into their professional learning. This year, we held a screening of the film Intelligent Lives with the administrators and the facilitators/coaches to celebrate National Inclusive Schools Week.

Action Plan 4: Improve the assessment of critical teacher behaviors by (1) aligning tools to Missouri Educator Standards (assessed on Educator Evaluation System), and (2) incorporating measures of student progress.

Status of Action Plan: Complete. The District decided to use KickUp and the pilot has begun with the first year beginning teachers. Tools to assess improved educator practices aligned to the Missouri Educator Standards and impact on student learning have been developed and deployed. The KickUp Client Success Team is partnering to help us address our Evaluation Questions for District induction program and Academy 1. Meetings are planned to integrate tools with the
evaluation system and to scale up to include early childhood and speech language pathologists. The 2018-19 school year will integrate the use of FastBridge progress monitoring results with KickUp processes.

**Action Plan 5: Increase flexibility and equity in the provision of coaching across partner districts.**

Status of Action Plan: Complete. The Technical Assistance Teams (TAT) model is intended to address this goal. The TATs meet regularly with a consistent structure of connecting/collaborating with each other to determine the needs of schools in each Zone. An electronic log used to track support provision was developed and has been deployed to all members of TATs. Designated TAT members to serve as "Key Communicators" to area coordinators to ensure we are addressing the needs of areas in alignment to the instructional leadership of each school. Beginning teachers and new hires with experience are being supported by specifically-trained facilitators who are experts in addressing the needs of new teachers at SSD. TAT team members meet biweekly to collaborate and plan for the needs of students and staff in schools. Adjustments are made after reviewing professional learning requests and the log. We are able to review/analyze contacts by district, by duration, and by type/topic of support, as well as participant evaluation of those events.

**Action Plan 6: Integrate a tiered systems framework across social, academic and behavioral professional learning.**

Status of Action Plan: Complete. Sent eight Planning and Development staff to the Ci3T Train the Trainer training in June 2017. Coaches who attended Train the Trainer are now coaching new schools. There are three years of initial support for Ci3T implementation: a training year, an implementation year, and a sustaining year. We currently have 3 new schools in the Training Cohort, 15 in the Implementing (first year) cohort, and 3 in the Sustaining Cohort (second year). We are also working with the Behavior Prevention & Intervention Focus Team to determine the merit of using the Interconnected Systems Framework (ISF) to support the social domain needs in schools and districts. We held our 3rd annual summer conference focused on tiered systems. Work has been done on the application process to guide districts to build capacity in coaching and measurement from the very beginning; districts will also be making a commitment to the ISF to support the social domain in schools for the next 3-4 years. Dr. Kathleen Lane will be modeling one of these District-level conversations so that we can understand more fully how this will look and feel as we take this on ourselves.

**Action Plan 7: Develop District-wide processes for implementing professional learning and evaluating effective professional learning.** This will be a continuation of the development of the District-wide approach to planning effective professional learning (prior action plan 1).

Status of Action Plan: Complete. The Planning and Development Leadership Team completed these processes at their retreat May 2017. While the processes have been developed, they will be deployed to the department and to other district professional developers 2018-19 through the multi-part professional learning, “Planning, Implementing and Evaluating Effective Professional Learning.”

**Action Plan 8: Develop an evaluation system for facilitators, coaches and effective practice specialists based upon industry standards (effective practices for coaching, facilitating, consulting) that integrates the 7 Principles of Effective Evaluation for Educators as outlined by DESE, for the purpose of promoting professional growth that leads to improved educator practices and sustained student outcomes.**

Status of Action Plan: Complete. We are using the SSD teaching standards as a foundation and adding specific standards and indicators as a supplement for the facilitators and coaches this school year. We have also created forms and workflows in TalentEd. The evaluation system is being used with facilitators and coaches. It is aligned with the seven principles of evaluation and focuses on the three professional frames (Commitment, Practice & Impact) as outlined by DESE. The department has developed foundational skills that have alignment to the work of all focus groups as well as the industry standards. The area coordinators have completed collaborative conversations with facilitators and coaches. Based on those conversations, staff members have chosen their areas of growth and growth plans have been completed. The department is currently working to collect examples of evidence for the focus team foundational skills and P&D Role Competencies. Work continues to be done on the collection of artifact data examples to support the impact of department members' growth plan goals. Each team is collecting examples for their area of focus (Literacy, Numeracy, Behavior Prevention Intervention, Autism, Measurement & Assessment, Specialized Instruction, Family Engagement). The Professional Learning Leadership Team will determine improvements to the processes for the 2018-19 school year.

**Action Plan 9: Explore converting the Data Team Continuum assessment to a form that would be completed by data teams following each meeting, which would allow for the collection of formative, first-hand data.**
Status of Action Plan: Complete. This was a pilot 2015-16 and went full scale 2016-17. Additional improvements are being considered. The Measurement and Assessment Coaches use the results to adjust support for Data Team Leaders and administrators. The Data Team Leadership Committee use the results to make recommendations for data team process improvement.

Action Plan 10: Use and support SSD administrator use of performance data of students in partner districts as one primary metric to guide professional learning planning.

Status of Action Plan: Complete. This is explicit in the planning professional learning process and needs to be taught to others. This skill is also taught to staff in the onboarding professional learning sequence for Planning & Development staff. The alignment of professional learning to area/region/building improvement plans is another approach to ensuring the use of performance data of students in partner districts as one primary metric to guide professional learning. We have developed a planning tool that asks what data the requested professional learning is intended to positively impact. It has been deployed through the TATs. We are also working with KickUp to upload student data and connect this to intervention data to determine impact and the contribution professional learning has on student learning.

Action Plan 11: Re-evaluate the procedures for completing PBIS Tiered Fidelity Inventory (TFI) ratings and the level of coaching support required to increase their reliability.

Status of Action Plan: Discontinued. With a shift to Ci3T, we have decided to decrease our direct support in the TFI, except for (a) those who request it; and (b) schools who are participating in Ci3T. There is naturally more support in each piece of their evaluation process (social validity & treatment integrity from self-report and outside observer), which may include the TFI. We are exploring different measures, such as climate surveys, which may provide more meaningful and reliable data.

Action Plan 12: Articulate and devise means to assess attainment of PBIS goals beyond implementation fidelity. Such goals might include positive impacts as reflected in measures of school climate, discipline trends, disability identification trends, or other indicators of SEB improvement.

Status of Action Plan: Complete. The Ci3T Core Team has developed an evaluation process that includes social validity, treatment integrity (both self-assessment and observer), as well as student outcome data. Also see Action Plan 11 update. The expectation for each region to write a goal in their improvement plans to address disproportionality issues will incorporate the methodology of tiered systems of supports and that results of this metric will be attainment of tiered systems goals.

Action Plan 13: Collaborate with administrators of operational staff to evaluate professional development needs and develop professional learning opportunities as appropriate.

Status of Action Plan: Complete. A facilitator’s role in developing professional learning for operations departments is defined. He has met with operational department leaders and has also promoted professional learning created for office support staff (secretaries and clerks) to other operational staff in the District. We are next moving to begin an Operational Professional Development Committee. This began in 2018-19. We are also planning an Operational Staff Mini Conference. This conference is the beginning of a plan for professional development for the departments.

Action Plan 14: Ensure fidelity through promoting a systematic approach to planning, implementing and evaluating effective professional learning for all staff across the county. This will be achieved through collaboration with others responsible for planning and providing professional learning. This would include Effective Practice Specialists, Administrators, Department Staff, and others.

Status of Action Plan: Complete. There will be an Administrator Professional Learning team that uses these processes, along with a facilitator designated for operational support staff professional learning. Planning and Development will deploy the use of TATs to promote this goal. Professional learning on effective professional learning will occur for staff who provide administrator professional learning. We are also planning a meeting for supervisors of others who provide professional learning for the District.

Action Plan 15: Using Partnership Agreements and the changing role of special education as significant guiding factors, redesign professional learning structures and supports to provide equitable and seamless implementation of specialized services for every student.
Status of Action Plan: Complete. TATs were deployed in 2017-18. Changes include realignment of supervision of professional learning staff and the development of focus (i.e., specialized) and foundation skills within TAT members. The use of TAT team members, Planning and Development Coordinators and the Director as "Key Communicators" seems to be promoting implementation of specialized services across and within zones. Partnership Agreements will be reviewed to determine if the domain "Professional Development" was listed as a priority for districts, and special education directors/lead ACs contacted based on that data. TAT members acting as Key Communicators will be meeting with their ACs to start planning for the 2019-20 school year professional learning needs. The integration of focus team members within the TATs has provided the beginning of a more seamless support of professional learning (focus teams are defined primarily by role or area of specialization, such as Autism, literacy, numeracy, etc.).

Action Plan 16: Refine data collection systems and explore options for measuring Professional Development’s impact on student outcomes. Retire redundant data collection systems when improved ones are identified.

Status of Action Plan: Complete. Partnered with Alan Wheat to develop the Planning and Development Log and evaluation process using Qualtrics. Purchased KickUp which will used for 3 projects this school year – 1) online registration, 2) new teachers and administrators and 3) intervention monitoring. Data from each of these projects is designed to include needs assessments completed by participants which will guide coaching, support and future professional learning planning. KickUp has been purchased and deployment will include 3 projects -- online registration, new teachers and new administrators, and intervention monitoring. Data from each of the projects is designed to include needs assessments completed by professional learning participants which will guide coaching, support and future professional learning planning.

Descriptive Program Data

Over the course of the 2017-18 school year there were 3969 instances of coaching support provided to staff that were coordinated through the TATs. There have been 2775 instances of coaching support provided through December over the 2018-19 school year thus far. Descriptive data pertaining to the number of professional development opportunities offered and participation in professional development workshops is discussed below.

Total Program Cost

Program staff include the director, 3 area coordinators, 1 administrative intern, 7 effective practice specialists, 1 technology specialist, 3 Parent Education and Diversity Awareness Administrators, 37 facilitators and coaches, 4 secretaries and 4 clerks.

Fiscal Year 2019 Budget:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$4,452,611.00</td>
</tr>
<tr>
<td>Benefits</td>
<td>$1,264,409.00</td>
</tr>
<tr>
<td>Purchased Services</td>
<td>$488,185.00</td>
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<tr>
<td>Supplies</td>
<td>$176,806.00</td>
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<tr>
<td>Capital</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>Total</td>
<td>$6,388,011.00</td>
</tr>
</tbody>
</table>

Monitoring Results

Voice of Customer Assessment:

A District-wide Professional Development Needs Assessment survey for teacher-level staff was completed during the 2016-17 school year. The survey provided an opportunity for staff to identify and prioritize professional learning needs. Key needs identified included teaching students with social/emotional/behavioral concerns and associated topics such as trauma-informed care and student mental illness. The survey also solicited feedback from staff regarding preferences for time and delivery format of professional learning, as well as barriers to participation in professional learning. Members of the Professional Development Committee conducted analyses of the data at the partner district level. Voice of Customer interviews were completed with 3 groups of stakeholders. Eighteen themes for improvement were
determined and corresponding action steps were put into place. Additional customer perception and satisfaction data is featured in the results below.

**Objective 1.1:** Provide professional learning that meets the needs of and is satisfactory to SSD staff (Guskey Evaluation Level 1: Participant’s Reactions).

**Measures**
1.1(a): Percent of respondents who agree or strongly agree with the Professional Development workshop evaluation survey item, “Today’s professional learning has increased my knowledge and understanding.”
1.1(b): Percent of respondents who agree or strongly agree with the Professional Development workshop evaluation survey item, “I believe the content and strategies from today’s professional learning will have a positive impact on student achievement.”

**Performance Targets:**
1.1(a): 90%
1.1(b): 90%

**Other Comparative Benchmark(s) (if appropriate/applicable):** None available

**Monitoring Schedule:** Twice per year

**Results:** The 90% target for each workshop evaluation survey item has met or exceeded 90% each of the last 4 years, suggesting professional learning largely meets the needs of individual participants.

<table>
<thead>
<tr>
<th>Percent of Agree or Strongly Agree Responses to Professional Development Workshop Evaluation Items</th>
<th>2014-15</th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today’s professional learning has increased my knowledge and understanding.</td>
<td>92% (N=5902)</td>
<td>94% (N=7576)</td>
<td>90% (N=5285)</td>
<td>91% (N=6434)</td>
</tr>
<tr>
<td>I believe the content and strategies from today’s professional learning will have a positive impact on student achievement.</td>
<td>94% (N=5893)</td>
<td>95% (N=7580)</td>
<td>90% (N=5308)</td>
<td>92% (N=6434)</td>
</tr>
</tbody>
</table>

**Objective 2.1:** Staff will build knowledge and skills through their participation in SSD professional learning activities (Guskey Evaluation Level 2: Participant’s Learning).

**Measure:** Percentage of teachers participating in New Teacher Academy who respond “I have gained new knowledge and/or skills during this professional learning experience and plan to apply the new ideas and/or strategies in my practice” in response to the question, “Which of the following statements best describes the usefulness of this professional learning experience?” that is asked across learning opportunities. This feedback is coordinated through the KickUp professional learning management platform.

**Performance Target:** 80%

**Other Comparative Benchmark(s) (if appropriate/applicable):** Not applicable

**Monitoring Schedule:** Quarterly

**Results:** The target for this measure was not met in the initial year utilizing the KickUp program. On average across learning opportunities, 77% of new teachers indicated that they both gained knowledge and planned to apply it. Thus it appears that there existed a perception among some participants that prescribed professional learning failed to provide new knowledge. The learning provided in New Teacher Academy is foundational and aligned to effective teaching practices commonly taught/practiced in pre-service. Moving to competency-based learning through micro-credentialing, paired with the use of data to determine optimal professional learning targets, should improve results for this objective.
Responses to the New Teacher Academy feedback survey item, “Which of the following statements best describes the usefulness of this professional learning experience?” (asked across learning opportunities)

<table>
<thead>
<tr>
<th>Question Response Option</th>
<th>Percent of Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have gained new knowledge and/or skills during this professional learning experience and plan to apply the new ideas and/or strategies in my practice.</td>
<td>77%</td>
</tr>
<tr>
<td>I have learned a bit, but I believe I need additional information and/or training in order to effectively implement what I learned.</td>
<td>8%</td>
</tr>
<tr>
<td>I have gained new knowledge and/or skills during this professional learning experience, but I don’t think the ideas and/or strategies presented would work very well for me.</td>
<td>7%</td>
</tr>
<tr>
<td>I do not feel like I learned a whole lot.</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>

Note. Response counts varied by learning opportunity from 6 to 47. The percentages reported are based on an overall total of 367 response counts provided across 16 different learning opportunities.

Objective 3.1: Professional learning will be well integrated with other District processes and have a positive impact on the organization (Guskey Evaluation Level 3: Organization Support and Change).

**Measures:**
3.1(a): Percent of respondents who agree or strongly agree with District-wide engagement survey item, “SSD’s training helps me to be effective in my job.”
3.1(b): Percent of respondents who agree or strongly agree with District-wide engagement survey item, “SSD provides professional development that supports district initiatives.”
3.1(c): Percent of respondents who agree or strongly agree with District-wide climate survey item, “I am satisfied with the services provided by the following SSD departments: (Professional Development).”
3.1(d): Percent of respondents who agree or strongly agree with District-wide climate survey item, “I receive effective professional development in special education.”

**Performance Targets:**
3.1(a): 80%
3.1(b): 80%
3.1(c): 90%
3.1(d): 90%

**Other Comparative Benchmark(s):** K12 Insight Engagement Survey Benchmark study

**Monitoring Schedule:** Annually

**Results:** Results over 4 years are displayed in the chart below. Engagement survey results are available for school years 2016-17 to 2018-19, while climate survey results are available from 2015-16 to 2017-18. Response counts are provided in subsequent table. Percentage agreement with designated district employee survey items assessing professional learning has fallen below established targets in most cases. In some cases the achieved percentage agreement fell nearly 10 or more percentage points below the established target.

Agreement with professional-learning related engagement survey items has increased marginally or remained consistent over 3 years. An exception to this is a 2018-19 school year decline for the Other/Support Staff group on the item, “SSD’s training helps me to be effective in my job”; only 55% of staff in this survey group expressed agreement with this item in fall of 2018.

Climate survey item results were mixed. Satisfaction with the services provided by the Professional Development department has met or neared the 90% target over three years. Exceptions to these positive trends are results for paraprofessionals assigned to partner districts (77% agreement in 2017-18) and staff in the “Other” survey group in 2017-18, which experienced a score decline (80% agreement in 2017-18).

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1 Targets corresponding to engagement survey items are lower given that this survey allows for a “neither agree nor disagree” response.
Teacher-level staff are surveyed regarding the receipt of effective professional development in special education. Eighty-one percent of partner district-assigned teachers, and 84% of SSD-managed school teachers, responded in the affirmative to this item in 2017-18, which falls below the 90% target.

Note. Red horizontal lines represent targets (80% for the engagement survey items and 90% for the climate survey items). Paraprofessionals and support staff are not presented with the climate survey item “I receive effective professional development in special education.” Because a “Neither disagree nor agree” response choice was added to the Engagement survey starting in 2016-17, only 3 years of results are shown. The climate survey item “I am satisfied with the services provided by the following SSD departments” includes an “I don’t know” response choice; those selecting this response were excluded from the agreement percentage calculation.

### District Survey Response Counts

<table>
<thead>
<tr>
<th>Survey</th>
<th>Role</th>
<th>2015-16</th>
<th>2016-17</th>
<th>2017-18</th>
<th>2018-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>Teacher</td>
<td>n/a</td>
<td>1934</td>
<td>1832</td>
<td>1639</td>
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<tr>
<td>Engagement</td>
<td>Para</td>
<td>n/a</td>
<td>733</td>
<td>694</td>
<td>615</td>
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<tr>
<td>Engagement</td>
<td>Other</td>
<td>n/a</td>
<td>365</td>
<td>353</td>
<td>366</td>
</tr>
<tr>
<td>Engagement</td>
<td>Total</td>
<td>n/a</td>
<td>3032</td>
<td>2879</td>
<td>2624</td>
</tr>
<tr>
<td>Climate</td>
<td>Partner District Teacher</td>
<td>1506</td>
<td>1420</td>
<td>1214</td>
<td>n/a</td>
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<tr>
<td>Climate</td>
<td>SSD Teacher</td>
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<td>359</td>
<td>357</td>
<td>n/a</td>
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<td>Climate</td>
<td>Partner District Para</td>
<td>570</td>
<td>542</td>
<td>412</td>
<td>n/a</td>
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<tr>
<td>Climate</td>
<td>SSD Para</td>
<td>149</td>
<td>172</td>
<td>156</td>
<td>n/a</td>
</tr>
<tr>
<td>Climate</td>
<td>Support Staff</td>
<td>354</td>
<td>339</td>
<td>339</td>
<td>n/a</td>
</tr>
<tr>
<td>Climate</td>
<td>Total</td>
<td>2950</td>
<td>2841</td>
<td>2478</td>
<td>n/a</td>
</tr>
</tbody>
</table>
K12 Insight, the firm SSD contracts with for each survey, provided engagement survey benchmark data\(^2\) for school year 2017-18. The comparison metric was a weighted average of item responses rather than a percent agreement (as presented here). Notably, weighted averages for the two engagement survey items among SSD staff (particularly teachers and paraprofessionals) substantially exceeded those among staff included in the K12 Insight benchmarking study. Comparisons are provided in the table below. These comparisons provide a counterpoint for interpretation of results; although perceptions of the adequacy of professional development fell below ambitious, internally-established targets, at the same time they outpaced results from a sampling of other school districts. Of note, SSD results for the additional item, “My principal or direct supervisor identifies opportunities for my professional growth and development” fell closer to the benchmark average, suggesting stronger linkages between professional learning and personnel evaluation as a potential area for improvement.

### Comparison Between SSD and Benchmark Study Averages on Professional Learning-Related Engagement Survey Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Benchmark Weighted Average</th>
<th>SSD Teacher Weighted Average</th>
<th>SSD Para Weighted Average</th>
<th>SSD “Other” Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSD’s training helps me to be effective in my job.</td>
<td>3.40</td>
<td>3.79 (+12%)</td>
<td>3.80 (+12%)</td>
<td>3.52 (+4%)</td>
</tr>
<tr>
<td>SSD provides professional development that supports</td>
<td>3.59</td>
<td>3.93 (+9%)</td>
<td>3.80 (+6%)</td>
<td>3.67 (+2%)</td>
</tr>
<tr>
<td>district initiatives.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Objective 4.1: Professional learning will generalize to the classroom as participants effectively apply new knowledge and skills they obtain (Guskey Evaluation Level 4: Participants’ Use of New Knowledge and Skills).

**Measure:**

4.1(a): Average within-year growth on EES standard indicators demonstrated by teachers whose baseline scores fall below the DESE criteria for “Proficient” (i.e., a baseline indicator score of 4 or lower).\(^3\)

4.1(b): Attainment of professional learning credentials/badges. *This represents a future measure that is not currently available.*

**Performance Targets:**

4.1(a): Increase over baseline. 2017 will serve as a baseline year. Average growth for indicators for which baseline fell below a rating of 5 in 2017 was 1.62 points (0 to 7 scale). 83.1% of chosen growth indicator follow-up scores were 5 or higher in 2017.

4.1(b): Measure is under development. SSD professional learning began awarding micro-credential badges in 2018-19.

**Other Comparative Benchmark(s) (if appropriate/applicable):** None available

**Monitoring Schedule:** Annually

**Results:** “Indicators” represent relatively narrow professional competencies that educators are assigned or choose to focus improvement efforts on in a given school year.\(^4\) SSD guidance around the number of indicators that teachers should establish goals for and work toward has varied to some degree over three years, though nearly 100% of teachers were rated on two separate indicators in 2017-18.\(^5\)

Results appear in the table below. The average indicator growth in cases where the baseline was less than 5 increased slightly from 2016-17 to 2018-19, meeting the target for this objective (though the difference was not statistically significant at \(p < .05\)). To put the average level of growth in context, a within-year gain of 2 points on the 0-7 scale

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\(^2\) The benchmarking study included nearly 28,000 responses from staff in eight geographically and demographically diverse school districts. Benchmark results combined all staff types and were not disaggregated by role (e.g., teacher vs. administrator).

\(^3\) Improvements to the EES rating system initiated in school year 2018-19 designed to increase reliability and validity of overall annual ratings will likely prevent meaningful comparisons between future data and that from prior years.

\(^4\) As an example, the most commonly chosen indicator of focus among SSD teachers in 2017-18 was 1.2: Student engagement in subject matter.

\(^5\) In 2016-17, a portion of educators worked toward a single indicator. In addition, technical issues prevented some results from inclusion in the analysis in 2016-17.
would, in most scenarios, approximate an increase to a higher performance level (e.g., from “developing” to “emerging”, in 2018-19 EES parlance) in the broader system; per the scoring rubric, a teacher must demonstrate “evidence of commitment,” “evidence of practice,” and “evidence of impact” at a higher level of mastery in order to improve 2 points on a given indicator. Higher scores within a performance level require that a teacher not only demonstrate evidence but also demonstrate it consistently/routinely.

### Educator Evaluation System Growth Indicator Improvement

<table>
<thead>
<tr>
<th>School Year</th>
<th>Average Growth When Baseline &lt; 5</th>
<th>Count of Indicators with Valid Baseline &lt; 5</th>
<th>% of Follow-up Indicators 5 or Above (All Teachers)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017-18</td>
<td>1.68 points</td>
<td>2602</td>
<td>77.8% (3496 total indicators)</td>
</tr>
<tr>
<td>2016-17</td>
<td>1.62 points</td>
<td>1258</td>
<td>75.4% (1880 total indicators)</td>
</tr>
</tbody>
</table>

Note. “Percent of follow-up indicators 5 or above” result include all teachers evaluated, not only those with baseline scores less than 5. The difference in average growth for those with baseline less than 5 between 2016-17 and 2017-18 did not achieve statistically significance at \( p < .05 \) (\( p = .081 \)).

**Objective 5.1:** Professional development will positively impact student learning and growth (Guskey Evaluation Level 5: Student Learning Outcomes).

**Measure:**
- 5.1(a): FastBridge aReading median student growth percentile
- 5.1(b): FastBridge aMath median student growth percentile

**Performance Target:**
- 5.1(a): 60th growth percentile (threshold for “meeting growth expectations”)
- 5.1(b): 60th growth percentile

**Other Comparative Benchmark(s) (if appropriate/applicable):** Growth percentiles are derived from national norms (i.e., the metric itself represents a comparative). National comparisons to students with disabilities are not yet available.

**Monitoring Schedule:** Twice per year following winter and spring benchmarks

**Results:** 2017-18 was the initial year of the FastBridge assessment implementation, during which students attending 12 partner districts participated in Benchmarking. Students across all partner districts participated in FastBridge benchmarking as of 2018-19. The table below provides fall to winter growth results over two years for the initial 12 districts (to allow for more direct comparison), as well as results for all districts through fall of 2018-19. Full-year growth estimates for 2017-18 could not be generated due to an incompatibility between the growth formula and SSD’s assessment schedule (this issue has since been resolved).

The results presented should be considered preliminary and interpreted with some caution given the following: (1) teachers are still learning the assessment system and some fall/baseline assessments were administered outside the intended assessment window in 2017-18 due to the staggering of trainings across partner districts; (2) staff are continuing to work through which students should be benchmarked (in which subject areas), as well as which data should be included in performance analysis to optimally monitor student growth; (3) District expectations for growth remain provisional pending the collection of additional data; and (4) the number of students participating in the assessment was much higher in school year 2018-19. As more SSD teachers are trained in and implement the FastBridge system, data will become more reliable while professional development staff will be better able to determine appropriate targets and engage in decision making based on aggregate results, as well as results disaggregated by partner district.

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6 Growth scores allow for assessment of a student’s growth across a school year in comparison to that of peers. An advantage of growth scores is that growth observed among students across different grade levels can be analyzed in the aggregate. Student growth percentiles are referenced to a student’s initial/baseline performance on the assessment. For example, the growth of a student whose year-start performance falls below the national 10th percentile is based on a comparison to the growth of other students who scored in this same range initially.
SSD assessment personnel tentatively established a preliminary FastBridge performance target of the 60th growth percentile as indicative of “meeting growth expectations” (whereas the 50th growth percentile is described as “approaching growth expectations” and the 85th as “exceeding growth expectations”). Student fall to winter growth in 2017-18 among the initial 12 districts trained neared, but failed to meet, the 60th growth percentile target. Median growth percentiles did exceed 50 in each content area, however (the 50th growth percentile would represent typical growth among students clustered at a similar baseline score range). Over three times as many students have been assessed in the current year of 2018-19. Fall to winter mean/median growth scores among students in this larger sample have been lower in comparison to 2017-18, falling below the 50th percentile. On the whole, performance among students in repeating districts (i.e., districts that were trained last school year) in 2018-19 was comparable to though slightly below that of new/added districts.

FastBridge Student Growth Percentiles, Fall to Winter Period

<table>
<thead>
<tr>
<th>Assessment / Subject Area</th>
<th>FY18 Mean / Median Growth Percentile, Initial Districts (Student Count)</th>
<th>FY19 Mean / Median Growth Percentile, Repeat Districts (Student Count)</th>
<th>FY19 Mean / Median Growth Percentile, New Districts (Student Count)</th>
<th>FY19 Mean / Median Growth Percentile, All Districts (Student Count)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FastBridge aReading</td>
<td>53.1 / 53.0 (1,285)</td>
<td>46.2 / 44.0 (2,526)</td>
<td>47.5 / 46.0 (1,483)</td>
<td>46.7 / 44.0 (4,009)</td>
</tr>
<tr>
<td>FastBridge aMath</td>
<td>54.3 / 57.0 (883)</td>
<td>44.6 / 41.0 (1,912)</td>
<td>45.3 / 41.0 (1,144)</td>
<td>44.9 / 41.0 (3,056)</td>
</tr>
</tbody>
</table>

Note. Districts participating in FY18 included Affton, Bayless, Clayton, Hancock Place, Hazelwood, Maplewood, Mehlville, Parkway, Pattonville, Ritenour, Riverview Gardens, and Webster Groves. Data for those districts (i.e., “repeat districts”) in both years is provided to allow for a direct comparison. Districts trained/added in 2018-19 included Brentwood, Ferguson-Florissant, Jennings, Kirkwood, Ladue, Lindbergh, Normandy, Rockwood, University City, and Valley Park. Data reported exclude the SNAP program. SSD Deaf and Hard of Hearing student results are excluded from 2017-18 reporting but were incorporated into individual district results starting in 2018-19. Though Kirkwood has used FastBridge for several years, their results were excluded from the 2017-18 dataset.

Ongoing Evaluation Planning: (select all that apply)

- ☐ Continue to monitor using same metrics and schedule.
- ☑ Revise evaluation indicators and metrics.
  
  Proposed revisions: Further define and operationalize the performance measure(s) relating to micro-credentialing.

- ☐ Conduct an in-depth evaluation.

  Estimated month/year the evaluation is to be completed:

- ☐ Revise the program description/plan.
- ☐ Other action(s) for improvement:

Rationale for Selection(s): Evaluation monitoring plan and measures remain appropriate.
Technology Services

Report Coordinator
Doug Austin, Chief Technology Officer

Evaluator
Karla Reichert, Evaluation and Research Associate

Contributors
Heather Murch, Director, Technology Projects and Innovation
Charlie Keller, Interim Director of Infrastructure
Mark Howell, Director of Technical Support

Summary and Recommendations

• The Technology Services department is providing high quality and timely technical support averaging a rating of 4.8 on a scale of 1 to 5 on client feedback surveys, and resolving requests in under 12 hours (as compared to a goal of less than 50 hours). Between July 1, 2017 and June 30, 2018, Technology Services resolved 24,389 tickets.

• While students and staff agree that technology resources continue to have a positive impact on instruction and student learning, climate survey data indicates that resource deficits continue to exist in partner districts.
  o Course of Action: Technology Services will continue to meet with the Assistant Superintendent over partner districts to help improve technology resource levels.

• There continues to be challenges with respect to staff affirming they have received adequate training and resources to do their job. Of the main job categories reviewed, this finding seems to be most prevalent within the paraprofessional job category.
  o Course of Action: A new action plan will be developed to identify meaningful next steps for improvement.

• SSD has not experienced any security breach incidents since the last evaluation and has managed to block 98.9% of messages posing a security threat.

• Despite below target staff perceptions of the reliability and speed of the network to support classroom instruction, internet bandwidth utilization targets have been met.

• Technology Services has transitioned to a project classification framework that tracks the amount of projects contributing to running, growing, and/or transforming the business.
  o Course of Action: Continued effort will be dedicated to balancing the number of projects taken on, to equally support all key stages of moving the District’s work forward.

New Action Plans Required as a Result of Evaluation Findings: (previously-developed action plans will remain in effect)

1. Revise the climate survey measure supporting Objective 1.3 by isolating the three factors listed (training, technology resources, technology’s impact on staff’s work) and listing them as separate questions, as a means of targeting future technology service efforts. (Objective 1.3)

  Anticipated Date of Completion: Spring 2020
Brief Program Description

The Technology Services department plans, develops, implements and supports a wide variety of technology solutions, network connectivity, and technology infrastructure throughout SSD in order to support student learning. The department also provides technical support to users throughout SSD.

The key, broad goals of this program include:

1. Technology will enhance instruction and support student success.
2. Technology services will facilitate operational efficiency and effectiveness.

Please consult the Technology Services Program Plan for a detailed description of this program and its intended outcomes. Program Plans are available through the SSD Evaluation and Research department.

A biennial report of the progress and status of Technology Services is required under Board Policy IM. The most recent full/comprehensive evaluation of this program was approved by the Board on October 24th, 2017.

Action Plans From Most Recent Evaluation/Monitoring Report(s)

The following action plans are on schedule:

Action Plan 9: Expand Information Technology Infrastructure Library (ITIL) based processes and implement formal service transition processes and technology change management processes. (multiple objectives)

Action Plan 10: Expand project management processes and metrics to improve delivery of technology solutions. (Objective 2.3)

Action Plan 12: Improve Technology Service Desk and knowledge management processes to improve access to technology support. (Objective 1.4)

Action Plan 13: Monitor and improve existing security controls. (Objective 2.2)

Action Plan 14: Complete wireless and network infrastructure upgrades in remaining SSD Schools. (Objective 2.4)

Action Plan 15: Implement information technology service design processes based on ITIL best practices. (multiple objectives)

Action Plans that are still in progress, but have gone beyond their initial expected date of completion, include:

Action Plan 1: Work with CFO, Assistant Superintendent of Partner Districts, Assistant Superintendent of College and Career Readiness, and Executive Director of Schools to develop a more streamlined process for identifying technology needs, budgeting for technology procurement, and planning the deployment of technology solutions to support student success. (Objective 1.1; OFI 1)

Action Plan 4: Collaborate with technology directors of partner districts to adjust technology support agreements to streamline technology support processes and provide SSD teachers and paraprofessionals ready access to technology support (Objective 1.4; OFI 1)

Action Plan 5: Continue to develop and improve existing process maps for Information Technology Service Management and identify opportunities to increase efficiency using ITIL based best practices. (Objective 2.1)

Action Plan 6: Add additional cybersecurity controls and monitor existing controls to provide better protection against information technology security incidents. (Objective 2.2)
Action Plan 7: Improve tracking of SEIMS change requests to improve estimates of time needed to implement requested changes. (Objective 2.3; OFI 4 and 5)

Action Plan 8: Continue wireless and network infrastructure upgrade E-rate projects to upgrade internal connectivity within SSD schools. (Objective 2.4; OFI 3 and 6)

The implementation of the following action plans, outlined in the most recent evaluation report, have been delayed:

Action Plan 2: Develop plan to streamline and improve the process for procuring, tracking, and replacing technology assets to improve equitable access to technology in all settings. (Objectives 1.1 and 1.2; OFI 1)

  Status of Action Plan: Technology Services is re-evaluating its technology tracking system, processes, and procedures. At this point in time, a new purchasing process has been developed, but needs to be implemented before the department can continue with this action step.

Action Plan 3: Developed a plan to provide more training to paraprofessionals in SSD buildings and partner districts to ensure staff are well trained when new technology initiatives are rolled out to District staff. (Objective 1.3; OFI 2)

  Status of Action Plan: The department is looking at various options for paraprofessional training.

Action Plan 11: Implement improvements to technology asset procurement, tracking, and replacements to provide equitable access to technology resources. (Objectives 1.1 and 1.2)

  Status of Action Plan: RFP is in the process of being published.

Action Plan 16: Create control plan for technology asset procurement, tracking, and replacement to ensure all students and staff have adequate access to technology resources to support student success in all settings. (multiple objectives)

  Status of Action Plan: RFP is in the process of being published.

Descriptive Program Data:

The Technology Services department provides technology resources and support for 24,918 students and over 5,000 staff.

Total Program Cost and Cost Effectiveness:

The total Technology Services budget for FY20 is $7,753,736, equating to a cost per student rate of $311.17.

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7 Pending approval.
Monitoring Results

Voice of Customer Assessment:
Technology Services makes use of VOC data by relying on climate survey results as monitoring measures for Objectives 1.1, 1.2, 1.3, 1.4, and 2.4.

Considerations

For the purpose of this report, the data has been disaggregated by the following site-specific groups:

<table>
<thead>
<tr>
<th>Survey Group</th>
<th>Includes staff/students from the following sites:</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSD schools</td>
<td>Northview High School, Ackerman School, Neuwoehner High School, Litzsinger School, Southview School, Bridges Program, Lakeside Center, Juvenile Detention Center</td>
</tr>
<tr>
<td>SSD technical schools</td>
<td>South Technical High School, North Technical High School</td>
</tr>
<tr>
<td>Partner district schools</td>
<td>Representation from all 22 partner districts</td>
</tr>
</tbody>
</table>

Therefore, the following groups’ experience have not been consistently accounted for in the findings that follow:
- Administration: Central Administration, Learning Center, and District-wide instruction
- Vocational Skills Program
- Support Staff

However, a preliminary review of findings across groups that were ultimately excluded from this report was conducted. In cases where positive responses were markedly lower than those of the three featured groups, the findings have been mentioned in the text portion of the relevant sub-section. It is worth noting that some of these more pronounced differences may have been due to the low sample size, as compared to the larger established survey groups.

The number of responses captured in each staff category are as follows:

<table>
<thead>
<tr>
<th>Survey</th>
<th>Role</th>
<th>2016-17</th>
<th>2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Survey</td>
<td>Partner District Teachers</td>
<td>1443</td>
<td>1232</td>
</tr>
<tr>
<td></td>
<td>SSD School Teachers</td>
<td>185</td>
<td>171</td>
</tr>
<tr>
<td></td>
<td>SSD Technical School Teachers</td>
<td>103</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>Partner District Para</td>
<td>566</td>
<td>421</td>
</tr>
<tr>
<td></td>
<td>SSD School Paras</td>
<td>161</td>
<td>137</td>
</tr>
<tr>
<td></td>
<td>SSD School Students</td>
<td>361</td>
<td>214</td>
</tr>
<tr>
<td></td>
<td>SSD Technical School Students</td>
<td>757</td>
<td>452</td>
</tr>
<tr>
<td></td>
<td>Support Staff</td>
<td>355</td>
<td>345</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3931</td>
<td>3065</td>
</tr>
</tbody>
</table>

Objective 1.1: The availability and functionality of technology resources meets stakeholder needs.

Measures:
(a) Teacher climate survey item, “Teachers have sufficient computer resources available for instructional use.”
(b) Teacher climate survey item, “Students have sufficient computer resources available for learning.”
(c) Student climate survey item, “My teacher(s) use technology for classroom instruction.”

Performance Target: 90% agreement

Monitoring Schedule: Annually (in the Spring)
Results:

Achievement of Objective 1.1 was assessed via three questions on the annual District-wide climate survey (teacher (2), student (1)). Performance targets remained unchanged from the previous year. This is not seen as problematic due to the ambitious level the targets were initially set at.

Partner district staff and student perceptions related to teachers and students having sufficient computer resources available for teaching/learning improved slightly over the previous year in spite of no changes made to the computer resources provided by SSD. However, the percentage of agreement among these partner district target audiences still falls up to 20% below the established voice of customer performance targets. Lower levels of agreement within partner districts specific to this objective are confounded by the shared responsibilities of operating within an environment of differing partner resource levels. SSD’s Technology Services intends to continue to meet with the Assistant Superintendent over partner districts to help improve technology resource levels across partner districts.

As for the SSD school settings, teachers’ positive perceptions of whether sufficient computer resources are available for instructional use remained within the target range of 90%. While SSD school teachers’ positive responses came in above target (91%), teachers at SSD’s technical schools indicated lower levels of agreement regarding the availability of sufficient computer resources (87%). Students having access to sufficient computer resources is not quite at target level in all three stakeholder categories, with the most notable difference being in partner districts.

Irrespective of perceptions surrounding the degree to which computer resources are sufficient for teaching/learning, based on the feedback of students at SSD schools (including technical schools), it is clear that teachers continue to use technology for instructional use. Not only did the results of this climate survey question exceed performance targets set, positive responses improved slightly from the previous year’s strong result of 94.1%.

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8 Based on a general SSD student climate survey category that includes both technical and SSD schools.
Objective 1.2: Technology resources demonstrate a positive impact on instruction and student learning.

**Measure:** Student climate survey item, “Having access to technology helps my learning.”

**Performance Target:** 90% agreement

**Monitoring Schedule:** Annually (in the Spring)

**Results:**

Ninety-three percent of students attending SSD schools and 97% of SSD technical school students who responded to the climate survey indicated having access to technology that helps their learning. This level of buy-in and perceived impact at the student level exceeds the 90% target originally set for this category.

Objective 1.3: Staff are proficient in the use of technology and receive adequate professional development in technology applications.

**Measure:** Climate survey item, “I have received adequate technology training and resources to do my job.”

**Performance Target:** 90% agreement

**Monitoring Schedule:** Annually (in the Spring)
Results:

This question is found on all employee group versions of the climate survey. Based on findings from the last Technology Services evaluation and the 2018 data listed below, no employee group has reached 90% agreement with this survey item within the last four years. The Technology Services team has identified this objective as an area in which they plan to address through the newly added action plan that would isolate the different components of the measure (training, resources, impact of technology) to better understand the specific areas that require a more focused effort.

Currently the department offers all SSD staff access to Lynda.com, an online learning platform hosted through LinkedIn. Levels of staff awareness about the availability of Lynda.com courses has not been assessed. In addition to online learning, the department also offers professional development specific to the Exceed database, Microsoft, Apple, and Google.

In terms of differences in staff groups’ levels of feeling they have adequate training and resources to do their job, unlike other objective areas, the difference between partner district and SSD staff is minimal. This may be due to the fact that all SSD staff, irrespective of their placement (e.g., partner district or SSD school), have access to classes held by Technology Services and Lynda.com resources. Training resources accessed by SSD staff working in partner districts may also be further supplemented by the specific training options made available to staff through the District within which they work. Instead, the more pronounced variance is seen when comparing the paraprofessional category to teacher-level staff, both in the SSD managed schools and partner district schools. While 83% of SSD school teachers and 87% of SSD technical school teachers indicated having adequate technology/training, 77% of their paraprofessional counterparts expressed agreement with the same statement. In the case of partner district paraprofessionals, 74% felt they had access to the necessary technology supports, while 81% of partner district teachers indicated agreement. At this point in time, the Technology Services department does not provide technology training specifically for paraprofessionals.

Notably, the greatest areas of concern linked to the category of staff receiving adequate technology training and resources to do their job are within some of the support staff job categories. As discussed in the considerations section, this could be exacerbated by the lower sample size, the double barreled nature of the question (e.g., measuring two separate ideas (training and resources), the nature of the job (e.g., transportation), or it could in fact be reflective of staff’s actual work experience. Further exploration would be required to understand the factors influencing these poorer outcomes (see table below).
<table>
<thead>
<tr>
<th>Support Staff</th>
<th>Employee Group</th>
<th>2018: % of Positive Responses</th>
<th>(n=)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpreter</td>
<td>62%</td>
<td>n=29</td>
<td></td>
</tr>
<tr>
<td>Other support</td>
<td>55%</td>
<td>n=31</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>53%</td>
<td>n=19</td>
<td></td>
</tr>
</tbody>
</table>

*As compared to: SSD school teachers (n=160), SSD school paraprofessionals (n=127), SSD technical school teachers (n=93), Partner district school teachers (n=1224), Partner district school paraprofessionals (n=415).

**Objective 1.4: Technology supports meet stakeholder needs.**

**Measure:**
(a) Teacher climate survey item, “Teachers have ready access to technical support.”
(b) Technology support satisfaction survey (5-point satisfaction scale)

**Performance Target:** 90% agreement

**Monitoring Schedule:** Annually (in the Spring)

**Results:**
Teachers are within the performance target range in terms of having ready access to technical support. Teachers at SSD technical schools are slightly above goal level (91%), while SSD school and partner district teachers are slightly below (88%). The Technology Services department is currently working to address partner district concerns through their technology partner district agreements.

For staff who have accessed technical support, satisfaction levels with the support received are high, averaging 4.8 on a scale of 1 to 5. This average is based on a 32% response rate on automated surveys distributed after a service call takes place. Between July 1, 2017 and June 30, 2018, Technology Services resolved 24,389 tickets.

**Objective 2.1: Technology support requests will be resolved in a timely manner.**

**Measure:** Average time to close service desk tickets

**Performance Target:** 30 hours for “Incidents” and 50 hours for “Service Requests”
Monitoring Schedule: Monthly

Results:

Technology support requests are being resolved in a timely manner, exceeding targets initially set for the department. More specifically, service request response/resolution rates (e.g., software/hardware requests) are much more prompt than targeted, averaging 11.97 hours, as compared to the goal of resolving requests in under 50 hours. The Technology Services department attributes this success to adopting Information Technology Infrastructure Library (ITIL) measures and implementing Service Desk software to help guide their processes and support documentation.

Incident response/resolution rates (e.g., functionality issue/report) are also within acceptable performance target range (under 30 hours), taking an average of 25.8 hours to resolve. The Technology Services department credits improvements in resolving issues to the efforts they have made to foster better communication between departments, in addition to meeting individually with managers to ensure issues are adequately addressed.

Objective 2.2: Cybersecurity measures will be implemented that prevent/minimize incidents that would compromise District data, corrupt software systems, or interrupt work processes.

Measure: Number of security breach incidents (also report number of incidents prevented/avoided)

Performance Target: Zero

Monitoring Schedule: Quarterly review of documented security incidents

Results:

SSD has had zero security breach incidents since the last evaluation. Security measures currently in place have blocked 56,324 messages qualifying as cyber security threats. Measures currently in place to support the department’s prevention and minimization of security threats at risk of compromising District data, corrupting software systems, and/or interrupting work processes include:

- Automatically blocking known bad sources.
- Increased scrutiny of sources linked to SSD positions that are primary targets for malicious users (e.g., Cabinet and Board members).

Between December 2018 and January 2019, 98.9% of messages posing a security threat, that had not already been identified as a known bad source, were blocked. Higher scrutiny measures for key targeted positions, identified 259 distinct threats across 12 intended users. Year-over-year data for this measure is not currently available, so a baseline of distinct threats has not been established.

An assessment detailing SSD’s susceptibility to cybersecurity attacks and probability of loss as a result, was completed by Nehemiah Security. Loss

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9 Scrutiny does not extend to faxes received. However, if the District were to transition to digital fax software, the same security screening mechanisms could be applied.

10 At this point in time, the ProofPoint System is only able to produce reporting within the last year.
probability, meaning the overall probability attacks will hit and succeed, was rated at 18%. If a successful attack were to occur, the expected loss is estimated to have a financial impact of approximately $1.5 million.¹¹

**Objective 2.3: Technology Services will rapidly initiate and complete projects including IEP form and process changes.**

**Measure:**
(a) Proportion of technology services projects completed on time (based on estimated man hours, disaggregate by security information and event management (SEIMS) vs. non-SEIMS projects)
(b) Calendar days between DESE/SSD requested change or feedback provided from file reviews and SEIMS completion of work required for release of change

**Performance Target:**
(a) 80% of projects completed on time
(b) 90 days

**Monitoring Schedule:** (a) Reviewed at the completion of each project, and (b) Reviewed quarterly from backlog list

**Results:**

Technology Services no longer disaggregates their data by SEIMS vs non-SEIMS projects. Nevertheless, during the program evaluation period all projects were completed on time. Workload (project) distribution is now managed based on a project classification framework that tracks the amount of projects that contribute to running, growing, and/or transforming the business. Ideally, resources (time/effort/financial) would be evenly committed across the three categories, with the ultimate benefit being that an approach like this will help the department to evaluate areas of need, prioritize projects, optimize interdepartmental processes, and generally provide insight on what the department could be doing differently.

The department has completed the development of a Project Prioritization Matrix/rubric designed to facilitate the determination of project priority levels, and assigned roles/responsibilities to each project member. Required documentation has been outlined, and supporting tools and templates developed, to facilitate the assessments needed to determine criteria for project classification. The Technology Services team is currently developing key performance indicators for projects, informing the Technology Plan Committee’s areas of focus based on project data, and determining what a balanced portfolio of tech projects would look like (e.g., Project Classification Framework/run, grow, transform concepts).

As for the measure related to timeliness of acting on feedback or change requests received from DESE, no instructions were given during the period under review.

**Objective 2.4: Technology services will provide adequate network access to meet stakeholders’ needs.**

**Measure:**
(a) Internet bandwidth utilization percentage by connection  
(b) Internal network/wireless bandwidth utilization by building  
(c) Teacher climate survey items, “Reliability and speed of the network are sufficient for instructional use, such as web video or progress monitoring.”

**Performance Target:**  
(a) 80% of projects completed on time  
(b) 90 days

**Monitoring Schedule:** *(a/b) Monthly, and (c) Annually (in the Spring)*

**Results:**

The target for this measure (average bandwidth utilization falling below 70%) has once again been met across all SSD sites this evaluation period. Results are outlined in the table below and represent data from the period of July 1, 2017 to June 30, 2018. SSD’s internet connection located at Central Office maintains an average utilization (during hours of operation) of 4% for inbound internet traffic, significantly lower than the 52% cited in the last evaluation cycle, and has remained consistent at 16% for outbound traffic.

<table>
<thead>
<tr>
<th>Building</th>
<th>Circuit Size</th>
<th>Avg. inbound utilization (in %)</th>
<th>Avg. outbound utilization (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSD Central Office</td>
<td>750 Meg</td>
<td>3.90</td>
<td>16.27</td>
</tr>
<tr>
<td>Ackerman</td>
<td>100 Meg</td>
<td>12.52</td>
<td>1.05</td>
</tr>
<tr>
<td>Central Garage</td>
<td>20 Meg</td>
<td>5.33</td>
<td>0.57</td>
</tr>
<tr>
<td>Juvenile Detention Center</td>
<td>50 Meg</td>
<td>4.56</td>
<td>0.20</td>
</tr>
<tr>
<td>SSD Learning Center</td>
<td>100 Meg</td>
<td>5.98</td>
<td>4.46</td>
</tr>
<tr>
<td>Litzinger</td>
<td>100 Meg</td>
<td>10.46</td>
<td>1.15</td>
</tr>
<tr>
<td>Northview</td>
<td>100 Meg</td>
<td>11.19</td>
<td>2.99</td>
</tr>
<tr>
<td>North Tech</td>
<td>250 Meg</td>
<td>7.32</td>
<td>1.68</td>
</tr>
<tr>
<td>South Tech</td>
<td>100 Meg</td>
<td>11.12</td>
<td>5.21</td>
</tr>
<tr>
<td>Southview</td>
<td>100 Meg</td>
<td>60.49</td>
<td>18.37</td>
</tr>
<tr>
<td>SSD Warehouse</td>
<td>20 Meg</td>
<td>3.15</td>
<td>0.45</td>
</tr>
</tbody>
</table>

Note: Southview contains the district disaster recovery site; more frequent peaks occur when data is being transferred from the CO data center to the disaster recovery data center. Internet traffic is given priority on the network over the disaster recovery data transfers. Technology Services is currently evaluating moving the disaster recovery site. North Tech has a faster connection to CO than other sites; the average utilization is much lower than other sites due to this increased speed. The speed was increased to accommodate the 1:1 initiative launched at North Tech this school year. We anticipate the network utilization to increase as the 1:1 initiative expands.

Despite meeting established targets for providing adequate network access suitable to the needs of stakeholders, staff perception of the reliability and speed of the network remains below target levels. Technology Services aims for a 90% agreement rate among teachers with the following statement: reliability and speed of the network are sufficient for instructional use, such as web video or progress monitoring. The most recent climate survey results indicate the levels of agreement across teacher groups as: SSD schools (82%), SSD technical schools (75%), partner district schools (78%).
Ongoing Evaluation Planning: (select all that apply)

☒ Continue to monitor using same metrics and schedule.
☐ Revise evaluation indicators and metrics.
   Proposed revisions:
☐ Conduct an in-depth evaluation.
   Estimated month/year the evaluation is to be completed:
☐ Revise the program description/plan.
☐ Other action(s) for improvement:

Rationale for Selection(s): Evaluation monitoring plan and measures remain appropriate.