

Missouri 21st Century Community Learning Centers Statewide Evaluation

2014-2015 Annual Report

Report to the Missouri Department of Elementary and Secondary Education

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Missouri 21st Century Community Learning Centers Statewide Evaluation Report: 2014-2015 Annual Report

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Introduction

In 2002, the No Child Left Behind Act (NCLB) was reauthorized and the responsibility for distributing federal funding regarding 21st Century Community Learning Centers (CCLC) was shifted to each state. These dollars are intended to fund afterschool programs that are located in high poverty areas or in low-achieving schools. Grants are awarded to applicants whose main goals are to increase academic achievement, provide additional enrichment activities, and provide literacy and educational services for the parents of youth who attend the afterschool programs (United States Department of Education, 2011).

Both the State Education Agency (SEA) and grantees must comply with specific evaluation and accountability policies and reporting structures. SEAs must provide comprehensive annual evaluations of their 21st CCLC programs, reporting on the performance measures listed in their applications to the United States Department of Education. These reports must be made available for public consumption.

Since 2002, the Missouri Department of Elementary and Secondary Education (DESE) has utilized federal dollars to fund afterschool programming in a wide variety of school districts and community organizations. To date, DESE has awarded approximately 191 grants serving approximately 20,000 youth per year (Afterschool Alliance, 2013; Missouri Department of Elementary and Secondary Education, 2014).

During the 2014-2015 program year, 62 grants were awarded 21st CCLC funding from DESE. These grantees represented 164 different sites/centers splitting approximately \$16.7 million that was delegated to DESE by the federal government. These 164 sites served approximately 29,000 youth during the 2014-2015 program year.

In fulfillment of the federal requirement for an annual evaluation, DESE contracted with the Missouri AfterSchool Network (MASN) to coordinate data collection and evaluation efforts for the 2014-2015 academic year. MASN then consulted with both the David P. Weikart Center for Youth Program Quality (CYPQ) at the Forum for Youth Investment and the Office of Social and Economic Data Analysis (OSED) at the University of Missouri-Columbia to jointly complete the Missouri 21st CCLC Statewide Evaluation.

Purpose and Components of the Evaluation

For several years, DESE, MASN, and several state committees have been discussing statewide, coordinated data collection efforts. In 2012, the MASN Quality committee and statewide Program Assessment Scoring/System committee met jointly and selected the Weikart Center's Program Quality Assessments (PQAs) as the instruments to be used for state-funded quality improvement efforts. During this time period, the MASN Quality committee had also been reviewing youth, family, staff, and other surveys to create "best practice" recommendations for DESE and all afterschool programs throughout the state. DESE and MASN began conversations about using these new resources to revise the 21st CCLC Statewide Evaluation process. As MASN and the Network's evaluator from OSED) began organizing survey questions into 'clusters,' the Weikart Center's Leading Indicators framework surfaced and seemed a natural fit to complement the PQA external assessments already planned for 2013-14. MASN entered into an agreement with the Weikart Center to create joint surveys that included the questions for both the Leading Indicators framework and the additional Missouri-specific goals that grew out of the work of the MASN Quality committee.

Since 2013, DESE has contracted with the Missouri AfterSchool Network to implement the 21st CCLC Statewide Evaluation framework, coordinate the statewide data collection efforts, and consult with OSED) and the Weikart Center to complete their individual and collective portions of the evaluations.

Evaluation Framework

The Missouri 21st CCLC Statewide Evaluation framework is based upon the Logic Model for Missouri's Afterschool Programs (Appendix D) adopted by the Missouri AfterSchool Network Steering Committee. As seen in the graphic below, afterschool programs benefit from training and professional development, coaching, and self-assessment activities that lead to improvements in both the skills of afterschool staff and improvements in the structure of afterschool programs. These changes in skills and structure can be measured in the quality of the afterschool programs. High quality afterschool programs lead to better youth outcomes, which lead to more success in college, career, and life.

Figure 1 – Logic Model for Missouri Afterschool Programs



21st CCLC Evaluation Statewide Goals and Objectives

Based on this framework, the Missouri 21st CCLC Statewide Evaluation includes goals and objectives in three areas: 1) academics, 2) program quality, and 3) college and career readiness skills. Historically, 21st CCLC evaluation has focused on academic outcomes such as increases in reading and math grades, but the Missouri 21st CCLC Statewide Evaluation framework also includes survey questions specific to academic self-efficacy as afterschool programs often positively influence youth's attitudes toward learning with the variety of hands-on learning activities found in afterschool. The second goal focusing on program quality includes the Leading Indicator framework and external PQA data. In addition to academic outcomes and program quality measures, the evaluation framework includes the youth outcomes that afterschool programs significantly impact that lead to college and career readiness: positive school behaviors, personal and social skills, and commitment to learning.

Goal 1: Support or increase student achievement and sense of competence in the areas of reading/communication arts, mathematics, and science.

- *Objective 1.1:* At least 50% of youth per site will maintain and/or increase their grades in reading/communication arts during the school year as measured by pre-/post-grades entered into Kids Care Center.
- *Objective 1.2:* At least 50% of youth per site will maintain and/or increase their grades in math during the school year as measured by pre-/post-grades entered into Kids Care Center.
- *Objective 1.3:* At least 50% of youth per site will maintain and/or increase their grades in science during the school year as measured by pre-/post-grades entered into Kids Care Center.
- *Objective 1.4:* At least 70% of youth per site will report a medium to high level of reading efficacy as measured by items on the Leading Indicators Youth Survey (average score of 3.5 or higher).
- *Objective 1.5:* At least 70% of youth per site will report a medium to high level of math efficacy as measured by items on the Leading Indicators Youth Survey (average score of 3.5 or higher).
- *Objective 1.6:* At least 70% of youth per site will report a medium to high level of interest and engagement in STEM as measured by questions from the Common Instrument Science Survey (total score of 3.0 or higher).

Goal 2: Develop and maintain a quality program that includes a safe and supportive environment, positive interactions, and meaningful opportunities for engagement.

- *Objective 2.1:* All sites will score at least an average 2.9 on the Program Quality Assessment tool.
- *Objective 2.2:* All sites will score at least an average 3.0 on the Organizational Context Leading Indicators of Staffing Model and Continuous Improvement.

- *Objective 2.3:* All sites will score at least an average 3.0 on the Instructional Context Leading Indicators of Academic Press and Engaging Instruction.
- *Objective 2.4:* All sites will score at least an average 3.0 on the External Relationships Leading Indicators of Family Communication and School Alignment.

Goal 3: Enhance youth’s college and career readiness skills and behaviors, including positive school behaviors, personal and social skills, and commitment to learning.

- *Objective 3.1:* At least 50% of youth per site will meet or exceed the school district’s average rate of school-day attendance. (FY15)
- *Objective 3.2:* At least 50% of total youth enrolled in the afterschool program per site will have at least 60 days of attendance in the afterschool program.
- *Objective 3.3:* At least 50% of youth per site will have no in-building or out-of-school suspensions. (FY15)
- *Objective 3.4:* At least 70% of youth per site will indicate a medium to high level of personal and social skills as measured by the youth outcomes survey (average score of 3.5 or higher).
- *Objective 3.5:* At least 70% of youth per site will indicate a medium to high level of commitment to learning as measured by the youth outcomes survey (average score of 3.5 or higher).

Evaluation and Program Quality Improvement

The evaluation design includes a number of steps intended to support sites not only with their data collection efforts, but also with the interpretation of those data. Program evaluation includes 1) support in the collection and submission of federally required data through the Kids Care Center (KCC) system, 2) collection of statewide survey data at multiple levels from multiple sources, and 3) preparation of site-level Leading Indicator, Academic and College /Career Readiness, and Summary reports allowing for site-level comparisons to statewide norms.

In addition to evaluation, the Logic Model and Missouri 21st CCLC goals and objectives provide a structure for utilizing data to improve program quality. The Missouri 21st CCLC grantees have been receiving training and technical assistance from the Missouri Afterschool Resource Center (MOARC) since the beginning of their grant, the 2014-15 academic year marks the second year of participation in the Program Quality Improvement process.

The Program Quality Improvement process (see Figure 2) is aimed at embedding a culture of continuous assessment and planning, and implementation (Smith, Akiva, Sugar, Lo, et al., 2012). Using the School-Age Program Quality Assessment (School-Age PQA) and Youth Program Quality Assessment (Youth PQA) tools (Smith & Hohmann, 2005), external evaluators collected objective data about the point of service at each 21st CCLC site. Sites worked with their Afterschool Regional Educator (technical assistance coach) to review the data to see where they were doing well and where they could improve. All sites created a site level Quality Action Plan that included detailed information about the timeline for the goals, parties responsible for making them happen, resources and supports necessary, and what that goals would actually look like when they were completed.

The Program Quality Improvement process used in the Missouri 21st CCLC programs was adapted from the Weikart Center’s evidence-based continuous improvement model and includes 1) support in the understanding and interpretation of the Leading Indicator reports(provided by the Weikart Center and OSEDA), and 2) support in the creation and implementation of Program Improvement Plans based on the data in the Leading Indicator reports. The Leading Indicators and other survey data were collected at the end of the 2014-15 program year and will be incorporated into the Program Quality Improvement process for the 2015-16 program year. The 21st CCLC grantees attended an Advanced Planning with Data session in the fall of 2015 where they explored the data, determined priorities, and created action plans based on both the PQA and survey data.

Table 1 presents a complete timeline of the services and supports surrounding program evaluation and quality improvement activities.

Table 1 – 2014-2015 Program Evaluation Component Timeline

Date/Time	Activities
Ongoing	Youth Work Methods trainings available to grantees
December 2014	DESE grantee meeting for new grantees only
Fall 2014	Kids Care Center trainings
September-November 2014	Advanced Planning with Data trainings for Cohorts 6 & 7, action plans created
September-December 2014	Program and site-level technical assistance visits (1 st visit), action plans created or updated
Ongoing	Kids Care Center data entry
October 2014–May 2014	External PQAs completed, feedback reports returned as completed
January–May 2015	Program and site-level technical assistance visits (2 nd visit), action plans reviewed
March-May 2015	Evaluation surveys administered
August 2015	Site-level Leading Indicator reports, Academic and College/Career Readiness, and Summary created
August-October 2015	Advanced Planning with Data sessions for Cohort 8
October 2015	Statewide evaluation report

Figure 2 – The Program Quality Improvement Process: ASSESS-PLAN-IMPROVE



Summary of Findings

In this section, we divide the presentation of findings into three sections arranged by the statewide goals. This section constitutes an overview of more detailed findings, which can be found beginning on page 18. We describe system-level performance against specific objectives and indicators set at the federal and state levels. In this section we draw upon several data sources including federally mandated data on school success outcomes (i.e., achievement, school behaviors), some of the Leading Indicators performance information, and Missouri-specific survey information. In the next section, we characterize findings from the all these data sources in terms of strengths and areas for improvement and summarize results across sites to describe findings at the system level.

Goal 1: Student Achievement/Academics

Goal 1: Support or increase student achievement and sense of competence in the areas of reading/communication arts, mathematics, and science.

- **Objective 1.1:** At least 50% of youth per site will maintain and/or increase their grades in reading/communication arts during the school year as measured by pre-/post-grades entered into Kids Care Center.
 - *Objective Unmet: However, almost all sites (97%) met this objective.*
- **Objective 1.2:** At least 50% of youth per site will maintain and/or increase their grades in math during the school year as measured by pre-/post-grades entered into Kids Care Center.
 - *Objective Unmet: However, almost all sites (97%) met this objective.*
- **Objective 1.3:** At least 50% of youth per site will maintain and/or increase their grades in science during the school year as measured by pre-/post-grades entered into Kids Care Center.
 - *Objective Unmet: However, nearly all sites (99%) met this objective.*
- **Objective 1.4:** At least 70% of youth per site will report a medium to high level of reading efficacy as measured by items on the Leading Indicators Youth Survey (average score of 3.5 or higher).
 - *Objective Unmet: However, most sites (67%) met this objective.*
- **Objective 1.5:** At least 70% of youth per site will report a medium to high level of math efficacy as measured by items on the Leading Indicators Youth Survey (average score of 3.5 or higher).
 - *Objective Unmet: However, most sites (73%) met this objective.*
- **Objective 1.6:** At least 70% of youth per site will report a medium to high level of interest and engagement in STEM as measured by questions from the Common Instrument Science Survey (total score of 3.0 or higher).
 - *Objective Unmet: However, a majority of sites (59%) met this objective.*

Program Strengths:

- ❖ Across most sites, a majority of youth maintained or increased their grades in reading/communication arts, math, and science. Given that most youth who participate are at-risk for academic problems, this finding suggests that afterschool programs are helping children with their academic achievement. However, comparative analyses with matched samples of youth who did not participate in afterschool are needed to verify any effects of afterschool on academic achievement.
- ❖ Youth report fairly high levels of efficacy in reading and science; more than two-thirds of sites met the benchmarks established by Goal 1. Over half the sites met the benchmark for youth science interest and engagement.

Improvement Areas:

- ❖ Although youth reported fairly high levels of efficacy across subject areas, especially in reading/communication arts and math, many sites can still work on providing youth with the activities needed to enhance their academic self-efficacy. In particular, sites should focus on enhancing youth efficacy and engagement in science.

Goal 2: Program Quality

Goal 2: Develop and maintain a quality program that includes a safe and supportive environment, positive interactions, and meaningful opportunities for engagement.

- *Objective 2.1:* All sites will score at least an average 2.9 on the Program Quality Assessment tool.
 - *Objective Unmet: 85% of sites met this objective (N=155).*

- *Objective 2.2:* All sites will score at least an average 3.0 on the Organizational Context Leading Indicators of Staffing Model and Continuous Improvement.
 - *Objective Unmet: However, almost all (98%) of the sites that submitted data for Staffing Model (N=134) scored a 3.0 or above. Ninety-one percent of all sites that submitted data for Continuous Improvement (N=136) scored 3.0 or above. This represents an improvement of 44% over last year, when only 47% of sites that submitted data for Continuous Improvement scored a 3.0 or above. NOTE: Changes in the scale items and missing data in both 2013-14 and 2014-15 suggest these changes may be less dramatic than indicated by the above percentages, however some improvement is evident. Results should be reevaluated in 2015-16 to see if improvement scores are sustained.*

- *Objective 2.3:* All sites will score at least an average 3.0 on the Instructional Context Leading Indicators of Academic Press and Engaging Instruction.
 - *Objective Partially Met: Nearly all (98%) of the total number of sites that submitted data for Academic Press (N=144) scored at or above a 3.0, while 100% scored at or above a 3.0 on Engaging Instruction.*

- *Objective 2.4:* All sites will score at least an average 3.0 on the External Relationships Leading Indicators of Family Communication and School Alignment.
 - *Objective Unmet: The majority (59%) of the total number of sites that submitted data for Family communication (N=120) scored at or above a 3.0, while most (77%) sites scored at or above a 3.0 on School Alignment.*

Program Strengths:

- ❖ Project directors and site coordinators report that they are familiar with the standards of quality for the 21st CCLC program, they collaborate across sites and share a common definition of quality, and are aware of the learning that is happening for their students during the school day. Ninety-nine percent of project directors and grantee administrators (N=210) stated that half or more of program staff are designing and delivering activities consistent with program goals and objectives for students.

- ❖ Staff appear to be satisfied with their jobs, know the goals and priorities of their programs, and are able to talk to their peers and supervisors. For 93% of sites which submitted staff survey data for this item (N=150), staff on average report they receive regular feedback (every few months) from their supervisor about how to work with youth in their program.

- ❖ Staff in the afterschool programs report that they are able to provide opportunities for growth and mastery for students, especially by exposing them to new experiences. For 98% of sites which submitted staff survey data for this item (N=149), staff on average report that approximately half of all students who come to the program will be exposed to new experiences during the course of the program.

- ❖ One hundred percent of sites scored at or above the target threshold (Objective 2.3) for Engaging Instruction. Scores on the quality assessment indicated improvement across all three domains of instructional quality (Supportive Environment; Interaction; and Engagement, see Table 21).

Improvement Areas:

- ❖ Staff in the 21st CCLC programs reported limited direct use of the Youth or School Age PQA tool. Half of reporting staff (50%) state they have used the PQA tools and observed staff working with youth for the purpose of assessing program quality. Approximately one quarter (24%) stated they are using a different tool to assess program quality. The use of the Youth PQA or the School Age PQA was not implemented as a program self assessment during the pilot year (2013-

2014) or during the current program year (2014-2015). Sites were not required to do program self assessment. Program self assessment is an important feature of the Youth Program Quality Improvement process, as it helps staff become familiar with the assessment process and the expectations surrounding the quality improvement process.

- ❖ While project directors and staff report that they know what academic content their students focus on during the school day, they are less likely to report involvement and facilitation of effective communication between school day stakeholders, parents, and themselves. This low level of involvement has remained stable since the pilot year. Communication of this type is important to ensure that all of the supports surrounding youth in the program are operating with a unified goal in mind.
- ❖ An important part of building new skills and intrinsic motivation in youth is involving them in engaging activities that grow increasingly complex over time. Staff report that for about half of the time, group projects offered in the afterschool program typically do not take over five sessions to complete.
- ❖ Parent involvement and connectedness to the program is an important part of making sure the needs of students and parents are being met. Parent respondents noted that the communication with the afterschool program is limited, particularly regarding the recruitment of parents to participate and/or lead sessions at the program. Although the 2014-2015 programming year indicates a slight increase in recruitment efforts directed toward families, less than half of reporting sites for the 2014-2015 program year indicate this is a regular practice at their site.

Goal 3: College/Career Readiness

Goal 3: Enhance youth's college and career readiness skills and behaviors, including positive school behaviors, personal and social skills, and commitment to learning.

- *Objective 3.1:* At least 50% of youth per site will meet or exceed the school district's average rate of school-day attendance. (FY16)
 - *This objective will be evaluated next year (FY 2016).*
- *Objective 3.2:* At least 50% of total youth enrolled in the afterschool program per site will have at least 60 days of attendance in the afterschool program.
 - *Objective Unmet: However, over half (53%) of sites met this objective.*
- *Objective 3.3:* At least 50% of youth per site will have no in-building or out-of-school suspensions. (FY16)
 - *This objective will be evaluated next year (FY 2016).*
- *Objective 3.4:* At least 70% of youth per site will indicate a medium to high level of personal and social skills as measured by the youth outcomes survey (average score of 3.5 or higher).
 - *Objective Unmet: However, almost all sites (98%) met this objective.*
- *Objective 3.5:* At least 70% of youth per site will indicate a medium to high level of commitment to learning as measured by the youth outcomes survey (average score of 3.5 or higher).
 - *Objective Unmet: However, almost all sites (94%) met this objective.*

Program Strengths:

- ❖ Overall, youth report strong skills on the constructs of personal/social skills and commitment to learning, with nearly all sites meeting the benchmarks.

Improvement Areas:

- ❖ Attendance is an area of improvement for 21st CCLC programs in general. About half the sites met the attendance benchmark (50% of youth attending at least 60 days). Given the research base demonstrating the importance of afterschool dosage to positive outcomes (e.g., Hansen & Larson, 2007; Huang et al., 2008), increasing attendance is one way to increase dosage.

Evaluation Methodology

Measures, Data Collection Procedures, and Sample Characteristics

The design and methodology of the Missouri 21st CCLC Statewide Evaluation intentionally uses the same structure and data as the site-level technical assistance in an effort:

- To improve cost effectiveness of investments in evaluation by reorienting evaluation purposes to include grantee/site level continuous improvement as a primary goal while maintaining system-wide summative conclusions as an important but secondary goal.
- To support continuous improvement decisions by:
 - Collecting data which is focused on specific best practices at multiple levels – system, organization, point of service – in order to simultaneously empower actors at all levels and roles to improve performance;
 - Collecting child level data which is proximal to the point of service setting where instruction is delivered in order to more effectively inform site level actors about actionable beliefs and skills that children both bring to, and develop, in the program.
- To improve our ability to differentiate between high and low quality programs by including information from multiple measures in a single profile of grantee/site performance, thereby reducing the threat of erroneous decision making due to error in any single measure.

The Leading Indicator framework is used for Goal 2 of this evaluation. The Leading Indicator framework came from the *Youth Program Quality Intervention Study* (Smith, Akiva, Sugar, Lo, et al., 2012) and was first executed in the state of Michigan's 21st CCLC program beginning in 2008. In the Missouri Evaluation, Leading Indicator reports were produced for each grantee, comparing grantee performance with normative performance across all grantees in the state. This report provides a summative profile of performance for the statewide system, across all sites and grantees.

The thirteen leading Indicators are constructed as composites from 29 scale scores drawn from survey and observational measures administered to program staff, students and parents. Scale scores are designed to identify best practices that impact quality and effectiveness of afterschool programs, according to theory, research and the experience of Weikart Center staff. The 13 leading indicator composite scores are constructed as means across each of the unweighted scales in that domain (Smith, Akiva, Sugar, Lo, et al., 2012). These composite scores are most appropriately used for exploratory purposes, guiding grantee/site staff toward further examination scale and item level scores. The Leading Indicators are arranged in alignment with five primary settings or contexts that characterize afterschool programming: Organizational, Instructional, External Relationships, Youth Skills, and Family Satisfaction. For the Missouri Evaluation, six of the leading indicators are used in the objectives of Goal 2.

The reliability and validity of the leading indicators are described in a report to the Oklahoma Department of Education and is based on research methods for composing scores from multiple criteria (Bobko, Roth, & Buster, 2007; Fralicx & Raju, 1982; Smith, Akiva, Sugar, & Hallman, 2012). Appendix B provides descriptive information and reliability evidence for the Missouri sample. In general, the 29 scales demonstrate acceptable levels of internal consistency (items within scales) and fairly high levels of inter-rater agreement (persons within program sites).

Given the increasing evidence base of the importance of so-called “noncognitive” skills for student college and career readiness development (Duckworth & Seligman, 2005; Dweck, Walton, & Cohen, 2011; Farrington et al., 2012), the Missouri 21st CCLC Statewide Evaluation Goal 3 is comprised of objectives that assess important facets of noncognitive skills. Objectives 3.4 and 3.5 specifically address the measurement of personal/social skills and commitment to learning. OSEDA and MASN developed scales that included items from the Leading Indicators, as well as items that reflected content from a number of existing scales. Based on feedback from last year's respondents, the Missouri-created youth scales were shortened. The Personal and Social Skills Scale is comprised of 19 self-report items that address communication skills, ability to relate to others, appropriate social behavior, and ability to take responsibility and initiative. The Commitment to Learning Scale, with six self-report items, assesses work habits and positive school engagement. Both scales are reported as unweighted means of the items that comprise the scales. Based on the data from the 2015 administration, estimates for the internal consistency reliability and inter-rater consistency of these scales are within acceptable ranges (see table A1).

In addition, to measure Objective 1.6, which addresses interest and engagement in STEM, the Common Instrument Science Survey (Noam, Robertson, Papazian, & Guhn, 2014, in prep) developed at Harvard's Program in Education, Afterschool, and Resiliency (PEAR), was used. This instrument was chosen in part because of MASN's involvement with Project LIFTOFF, a grant

from the Noyce Foundation to implement STEM-related professional development and programming in Missouri. Project LIFTOFF sites in Missouri participated in the validation study for the Common Instrument.

The following describes each measure and source of information used to construct the Leading Indicator and College and Career Readiness reports as well as the procedures for data collection. Sample characteristics are also provided.

Project Director/Site Coordinator Survey and Sample

In many 21st CCLC systems across the United States, a grantee typically oversees multiple sites (or locations where programming is offered), each of which is managed by a site coordinator who is responsible for the daily operations of programming and staff supervision. Conversely, the project director typically operates at a higher level of management, communicating accountability policies to site coordinators. However, in Missouri’s 21st CCLC system, there are grantees who offer programming at only one site and in which the project director is also the site coordinator. Therefore, this survey was directed primarily at project directors, although site coordinators who were not also project directors were surveyed where appropriate.

The project director/site coordinator survey consisted of 56 items addressing perceptions of various practices and organizational characteristics that fell under the Organizational and External Relationships Contexts. These questions focused on issues such as staff capacity to carry out the work, job satisfaction, the role of youth in governing the program (where age appropriate), enrollment for students with academic risk factors, accountability and collaboration norms, connections to the school day, community engagement with the afterschool program, coordination of the program, and strengthening families.

The project director/site coordinator survey was administered between March and May of 2015 via an online survey incorporated into the state’s MOPD Toolbox. Individualized survey links were prepared for each 21st CCLC site with the unique organization identifier included in the survey link so that responses were attributed to the correct site. Standardized e-mail text was provided to the grant administrator for distribution along with the site-specific survey link. E-mails were sent regularly to grant administrators to update them on the number of respondents so they could monitor their data collection.

A total of 210 project directors and site coordinators responded to the online survey, representing 91% of the 162 Missouri 21st CCLC sites (N=147). Table 2 below displays characteristics of project directors and site coordinators. The majority of respondents had a master’s degree, were female (over 85%), and White (over 70%). Nearly half (49%) were certified teachers. The average number of hours worked per week was 25.7, and project directors and site coordinators worked for approximately 9.8 months out of the year.

Table 2 – Project Director/Site Coordinator Survey Respondent Characteristics

Characteristics	N=210
Average years of experience at site in any capacity	4.3
Average years of experience at site as Project Director/Site Coordinator	3.3
Education level	
Less than high school diploma/GED	0%
GED/High school diploma	2%
Some college, no degree	12%
Associate’s degree	12%
Bachelor’s degree	27%
Graduate program but no degree yet	4%
Master’s degree	39%
Doctorate	2%
Other professional degree after Bachelor’s	2%
Teaching certification	49%
Average months worked per year	9.8
Average hours worked per week	25.7
Gender	21.4% male
Race (check all that apply)	
White	72%
African American	26%
Hispanic	0.5%
Arab American	0.5%
Asian	0.0
Other race	1%

Direct Staff/Youth Worker Survey

The Direct Staff/Youth worker survey consisted of 56 questions and was directed at the staff within each site/center who were directly responsible for providing programming to children and youth. These staff were in direct contact with children and youth on a day-to-day basis. This survey asked questions regarding job satisfaction, involvement in continuous quality improvement efforts, communication with peers and with the project directors/site coordinators, the extent that academic activities are part of their afterschool offerings, the growth and mastery skills of the children and youth in their programs, and connections to the school day.

The Direct Staff/Youth Worker survey was also administered between March and May of 2015 via an online survey incorporated into the state's MOPD Toolbox. Individualized survey links were prepared for each 21st CCLC site with a unique organization identifier included in the survey link so that responses were attributed to the correct site. Standardized e-mail text was provided to the grant administrator for distribution along with the site-specific survey link. E-mails were sent regularly to grant administrators to update them on the number of respondents so they could monitor their data collection.

A total of 1,200 afterschool teachers and youth workers responded to the online survey, representing responses from 93% of the 162 Missouri 21st CCLC sites (N=150). Table 3 highlights the characteristics of the afterschool direct staff and youth workers that interacted with youth on a daily basis. The average number of years worked at the site was approximately three years and the majority of staff had some college, a bachelors', or a master's degree. Approximately 48% of staff were certified school-day teachers and white females. The majority of staff worked an average of 8.6 months out of the year and approximately 12.9 hours per week.

Table 3 – Direct Staff/Youth Worker Survey Respondent Characteristics

Characteristics	N=1,200
Average years of experience at site	3.12
Education level	
Less than high school diploma/GED	1%
GED/High school diploma	9%
Some college, no degree	21%
Associate's degree	8%
Bachelor's degree	21%
Graduate program but no degree yet	8%
Master's degree	31%
Doctorate	0%
Other professional degree after bachelor's	1%
Teaching certification	55%
Average months worked per year	8.1
Average hours worked per week	11.4
Gender	18% male
Race	
White	76%
African American	18%
Hispanic	3%
Arab American	0.0
Asian	1%
Other race	3.5%

Youth Survey

Two youth surveys were administered as part of the 2014-2015 Missouri statewide evaluation of 21st CCLC programs. The Younger Youth Survey consisted of 21 questions designed for youth in kindergarten through second grade. A second youth survey was designed for youth in third through twelfth grades and consisted of 32 questions. Both youth surveys were designed for youth who attended the afterschool programs. Youth were asked to report on social and emotional competencies, their homework completion in the afterschool program, the extent to which they felt engaged in and belonged in the program, work habits, commitment to learning, and their self-efficacy regarding academic content areas such as English/reading, math, science, and technology. Some of these measures were adapted from the California Outcomes Project (Vandell, 2012) and are being used with permission.

Most grantees completed the Youth Surveys via an online survey incorporated into the state's MOPD Toolbox. Individualized survey links were prepared for each 21st CCLC site with the unique organization identifier included in the survey link so that responses were attributed to the correct site. Additionally, unique student identifiers were provided for each youth so that their youth survey data could be matched to the attendance and grades data included in the Kids Care Center system. Some programs requested Spanish copies of the survey which were provided on paper. If paper copies were returned, they were entered into the online survey by MASN staff. Prior to receiving the youth survey link, sites sent home a passive consent form to parents explaining the rationale for the youth survey and the confidentiality measures being implemented. E-mails were sent regularly to grant administrators to update them on the number of respondents so they could monitor their data collection.

A total of 10,257 youth in K through 12th grade completed a survey, representing responses from 99% of Missouri 21st CCLC sites (N=160). Table 4 presents demographic information for the youth in this sample. The average age of youth in the 21st CCLC programs was 10 years old and their average grade in school was fourth grade. Forty-nine percent of youth were male while 66% reported they were white, 25% reported they were African American, 6% reported Hispanic, 4% reported "other," 1% reported being Asian, and 0% reported being Arab American.

Table 4 – Youth Survey Respondent Characteristics

Characteristics	N=10,257
Average age	9.96
Average grade	4.21
Gender	49% male
Race (check all that apply)	
White	66%
African American	25%
Hispanic	6%
Arab American	N/A
Asian	1%
Other race	4%

Parent Survey

The parent survey consisted of 20 questions directed at the parents/guardians of all children and youth attending the afterschool programs, regardless of their age. The parent survey asked questions about the communication between themselves and the afterschool program, the academic efficacy of their child(ren), the personal and social skills of their children, their child's commitment to learning, the confidence and convenience of the services provided at the afterschool program, and the connection that they have with the school itself.

The grantees utilized a mix of online and paper surveys for parents. Individualized survey links were prepared for each 21st CCLC site with the unique organization identifier included in the survey link so that responses were attributed to the correct site. A paper survey with the unique organizational identifier in the footer was also provided to each site to be copied and distributed if they chose. If paper copies were returned, they were entered into the online survey by MASN. E-mails were sent regularly to grant administrators to update them on the number of respondents so they could monitor their data collection.

A total of 3,065 parents completed a survey, representing responses from 82% of Missouri 21st CCLC sites (N=133). Table 5 displays information for the parent sample from 2014-2015 program year data collection. The majority of parents ranged between 26 and 45 years old had a four-year degree or less, and had a household income of less than \$60,000 per year. Nineteen percent of respondents were male, while 58% reported white as their race, 32% reported African American, 7% reported Hispanic, 2% reported "other race," 1% Asian, and 1% reported Arab American.

Table 5 – Parent Survey Respondent Characteristics

Characteristics	N=3,065
Average Age	
25 or less years old	4%
26-30 years old	17%
31-35 years old	23%
36-40 years old	20%
41-45 years old	12%
46-49 years old	5%
50-55 years old	5%
56-60 years old	1%
61-65 years old	1%
66 or more years old	12%
Education	
Less than high school diploma/GED	7%
GED/High School diploma	26%
Some college, no degree	26%
Associate's degree	14%
Bachelor's degree	15%
Graduate program but no degree yet	3%
Master's degree	7%
Doctorate	1%
Other professional degree after Bachelor's	1%
Race (check all that apply)	
White	58%
African American	32%
Hispanic	7%
Arab American	1%
Asian	1%
Other race	2%
Gender	19% male
Income	
\$20,000 to \$29,999	15%
\$30,000 to \$39,999	19%
\$40,000 to \$49,999	17%
\$50,000 to \$59,999	11%
\$60,000 to \$69,999	7%
\$70,000 to \$79,999	6%
\$80,000 to \$89,999	4%
\$90,000 to \$100,000	4%
More than \$100,000	9%

Program Quality Assessment

The *Youth Program Quality Assessment* (Youth PQA) and the *School-Age Program Quality Assessment* (School-Age PQA) are observation-based measures which assess various aspects of program quality, including the Instructional Context of the Leading Indicators. The PQAs use observational notes to score rubrics describing the extent to which specific staff practices are happening within each program session.

The Youth PQA is composed of 60 items comprising 18 different scales, which fall under four domains: Safe Environment, Supportive Environment, Interaction, and Engagement. The Youth PQA is currently being used in over 95 afterschool networks across the United States and evidence from multiple replication samples suggests that data produced by the Youth PQA has characteristics of both precision (reliability) and meaningfulness (validity) (Smith, Akiva, Sugar, Lo, et al., 2012; Smith & Hohmann, 2005). In 2013, MASN worked with the Weikart Center to add an additional scale for the Walkthrough version of the School-Age PQA.

The School-Age PQA is composed of 68 items comprising 20 different scales, which also fall under the same four domains as the Youth PQA: Safe Environment, Supportive Environment, Interaction, and Engagement. The School-Age PQA assesses staff instructional practices that are developmentally appropriate for younger children. Evidence of reliability and validity for the School-Age PQA is available from the Weikart Center.

Program quality *external* assessments were conducted for all sites. Sites that received program quality external assessment contracted with 4-H Center for Youth Development, which coordinated the assessment process by scheduling the raters for site-level assessments. Raters received endorsement through the completion of a rigorous reliability training process in which they are required to pass an examination by reaching 80% perfect agreement with the Weikart Center's gold standard scores on the PQA.

Between October 2014 and May 2015, a total of 159 external assessments were conducted using either the School-Age PQA Walkthrough Method or the STEM PQA (sites serving youth from kindergarten through high school were assessed using both the PQA Walkthrough Method and STEM PQA)¹, representing 98% of all sites.

Kids Care Center (KCC)

Missouri's 21st CCLC grantees enter student attendance, participation, and other data into the Kids Care Center system. The information extracted from Kids Care Center and included in this report represents recruitment and retention information, program attendance information, student progress on academic achievement, and community partnerships.

The Missouri AfterSchool Network provides technical assistance to grantees needing to fulfill data submission requirements via the online KCC system. Grantees have a schedule of due dates for various data elements in order for all required information (e.g., grantee profile and their operations, objectives, activities, partners, teacher survey, and feeder school information) to be entered.

¹ Some of these sites ended up reporting on either the School-Age PQA or the Youth PQA in Scores Reporter. Some observations were erroneously entered into the incorrect PQA tool, and for those using the STEM PQA, if no STEM programming was offered, entries were submitted via the Youth PQA tool.

Findings/Results

The following section presents findings from the 2014-2015 Missouri 21st CCLC Statewide Evaluation conducted by the Weikart Center and OSEDA. The 2014-2015 program year marks the second year the Missouri 21st CCLC has used the Leading Indicators framework, as well as the statewide goals and objectives, to collect, analyze, and present data aligned with specific best practices at multiple levels of each grantee.

Goal 1: Student Achievement/Academics

The objectives for Goal 1 provide site-level benchmarks addressing the extent to which sites are helping youth increase academic achievement, as well as efficacy in reading/communication arts, math, and science. Table 6 shows how sites performed on these objectives statewide. Note that only sites with at least three responses per objective were included. The Reading and Math Efficacy scales used for Objectives 1.4 and 1.5 were shortened, thus comparisons with last year's data are not recommended.

Table 6 – Performance on Goal 1 Objectives

Objective	Percent of sites meeting objective	Mean site percent	Range
1.1—At least 50% of youth per site will maintain and/or increase their grades in reading/communication arts during the school year as measured by pre-/post-grades entered into Kids Care Center.	96.5% (n = 140)	78.6%	40-100%
1.2—At least 50% of youth per site will maintain and/or increase their grades in math during the school year as measured by pre-/post-grades entered into Kids Care Center.	96.5% (n = 140)	76.5%	34-100%
1.3—At least 50% of youth per site will maintain and/or increase their grades in science during the school year as measured by pre-/post-grades entered into Kids Care Center.	98.5% (n = 133)	80.3%	35-100%
1.4—At least 70% of youth per site will report a medium to high level of reading efficacy as measured by items on the Leading Indicators Youth Survey (average score of 3.5 or higher).	66.5% (n = 156)	74.4%	25-100%
1.5—At least 70% of youth per site will report a medium to high level of math efficacy as measured by items on the Leading Indicators Youth Survey (average score of 3.5 or higher).	72.8% (n = 156)	76.2%	0-100%
1.6—At least 70% of youth per site will report a medium to high level of interest and engagement in STEM as measured by questions from the Common Instrument Science Survey (total score of 3.0 or higher).	58.8% (n = 147)	72.0%	0-100%

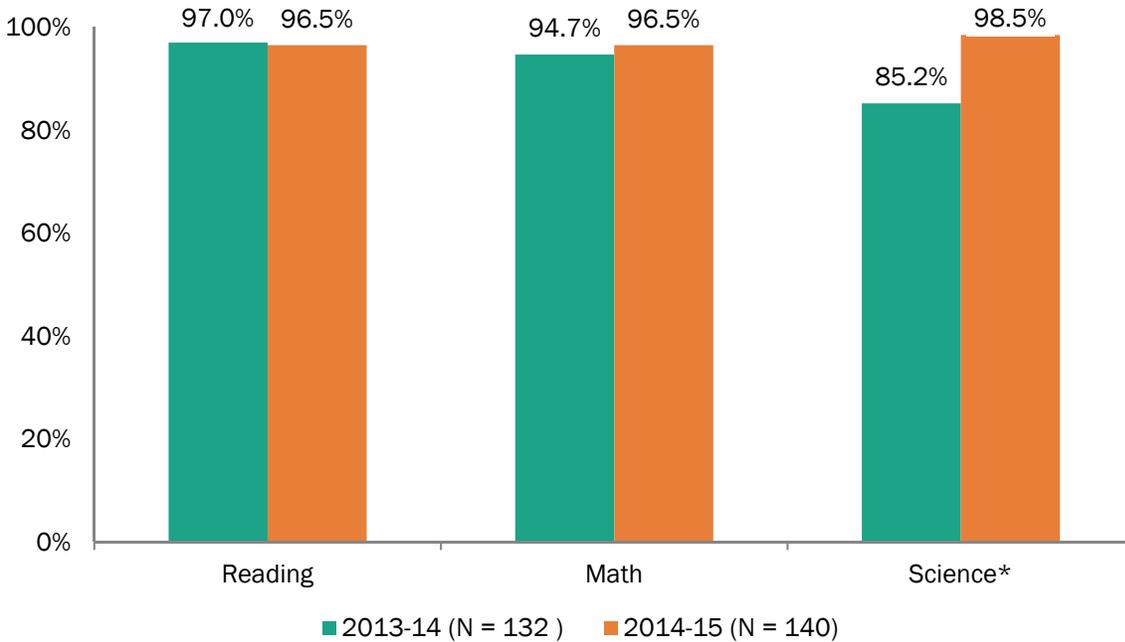
Data Source: Youth Survey

Key Points:

- Based on grades across time in reading/communication arts, math, and science, almost all sites were able to report that at least half of their students had maintained or increased their academic achievement in those three areas. As shown in Figure X below, the benchmark percentage for math increased slightly from last year, whereas the percentage for science showed a larger increase.
- Overall, most sites met the established benchmark for youth reporting on their own skills with respect to reading and math efficacy.
- A majority of sites met the benchmark for STEM interest and engagement.

Detailed scores on the Reading and Math Efficacy Scales used for Objectives 1.4 and 1.5 are shown in Appendix C, pages 42-44 as part of the results from the Leading Indicators. Table 11 shows how youth scored statewide on the items that comprise the Common Instrument Science Survey.

Figure 3—Maintenance/Increase of Grades over the School Year



*Science N's differ from the legend: 128 for 2013-14 and 133 for 2014-15.

Table 7 – Detailed Item Scores on Common Instrument Science Survey

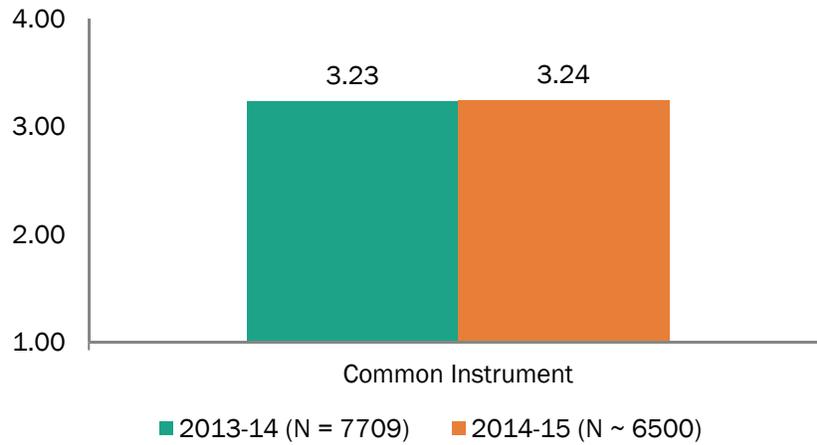
PROMPT: Please check the box that best describes what you think about the statement. (1 = Strongly disagree; 2 = Disagree; 3 = Agree; 4 = Strongly agree)	Statewide average (n's differ by item; about 6500 youth)
Overall Common Instrument Score	3.24
Science is something I get excited about.	3.15
I like to participate in science projects.	3.36
I like to see how things are made (for example, ice-cream, a TV, an iPhone, energy, etc.).	3.49
I am curious to learn more about science, computers or technology.	3.32
I want to understand science (for example, to know how computers work, how rain forms, or how airplanes fly).	3.30
I get excited about learning about new discoveries or inventions.	3.35
I pay attention when people talk about recycling to protect our environment.	3.24
I am curious to learn more about cars that run on electricity.	3.13
I would like to have a science or computer job in the future.	2.88
I like online games or computer programs that teach me about science.	3.12

Data Source: Youth Survey

Key Points:

- In general, youth reported relatively positive interest and engagement in science.
- Based on item means, the students were most interested/engaged in how things are made and show great interest/excitement in working on science projects and learning about new discoveries and inventions.
- Based on item means, the students reported being somewhat less likely to pursue a job in the science or computer fields and a lower interest in online games/computer programs for the purposes of learning about science.

Figure 4—Common Instrument Means over Time



Goal 2: Program Quality

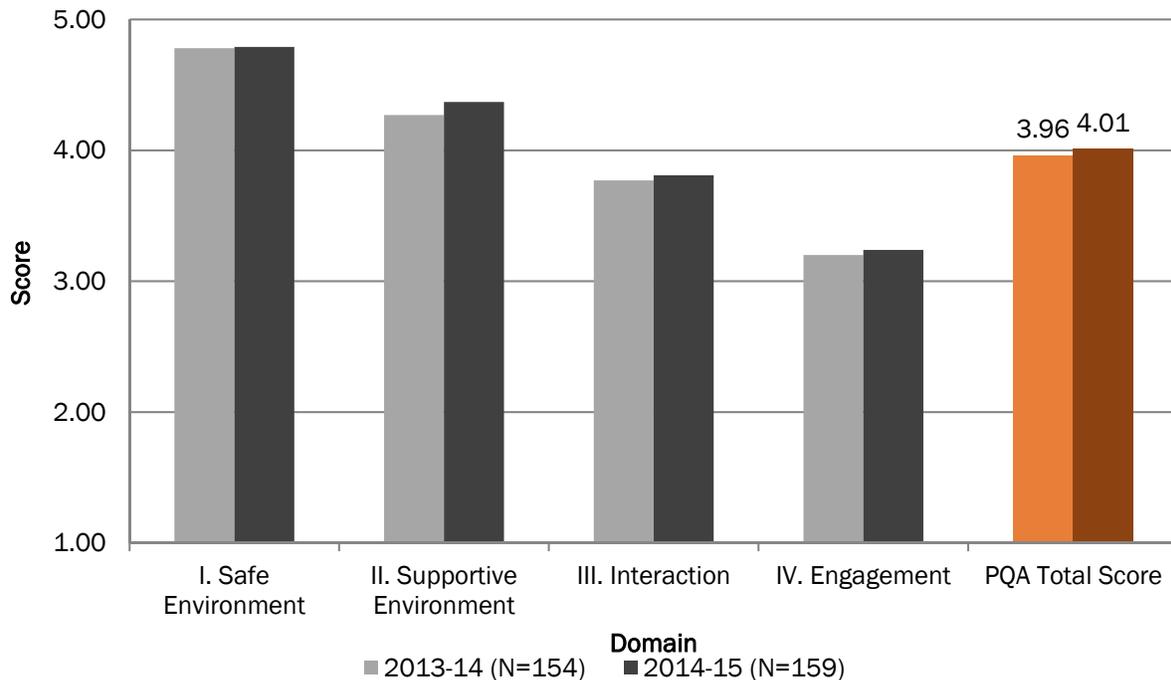
This section presents findings specific to statewide evaluation Goal 2: program quality. These findings are arranged by objective. Objective 2.1 is presented using PQA total scores, while objectives 2.2 – 2.4 are presented in the Leading Indicators framework. Each Leading Indicator is presented on its own page(s) and includes item-level details.

Objective 2.1 – Program Quality Assessment

Objective 2.1 is related to the total score on the Program Quality Assessment. Sites used either School-Age PQA Walkthrough Method (sites serving younger youth) or the STEM PQA (sites serving older youth). Some sites that served a broader age of youth chose to do both assessments. Objective 2.1 states that all programs will achieve a total score of 3.0 or higher on the PQA. The results below describe findings from the PQA data.

Ninety-seven percent of all 21st CCLC sites (N=159) submitted PQA data. Of these 159 sites, 85% met the selected benchmark of 3.0 or greater on Objective 2.1. Additionally, the average overall score for all sites that submitted PQA data was 4.01 (see Figure 2).

Figure 5 – Aggregate Domain and Total Scores on the School-Age PQA Walkthrough Method and the STEM PQA



Organizational Context: Staffing Model & Continuous Improvement

Figure 6 - Leading Indicator 1.1 - Staffing Model

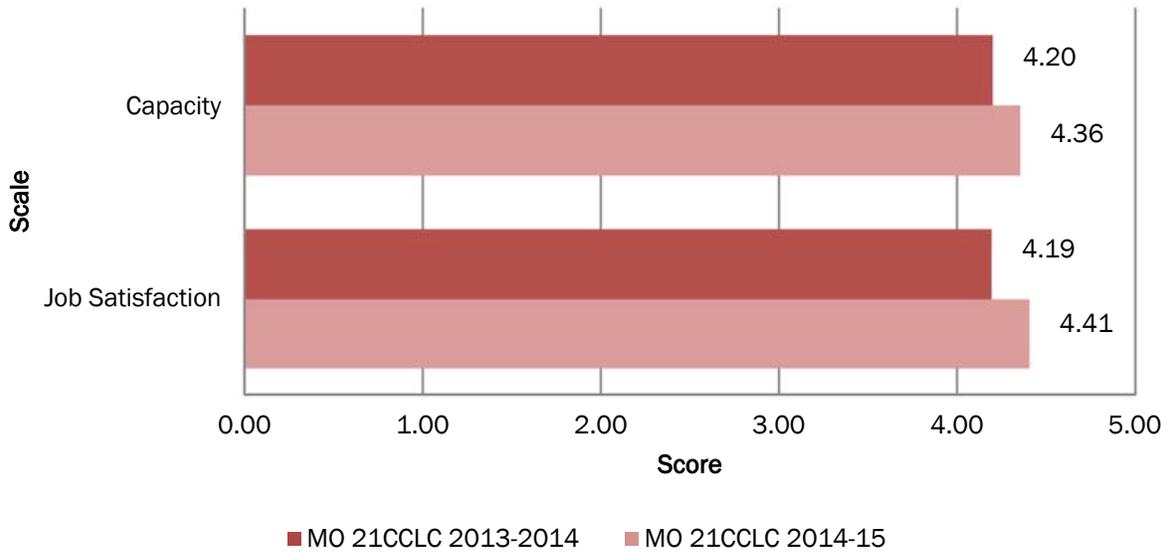


Table 8 – Capacity Scale Item Scores

<i>PROMPT: Please rate the extent to which the following statements are true for staff in your program (1=Almost never true of staff, 3=True for about half of staff, 5=Almost always true of staff).</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Capacity	4.20	4.36
Staff come to the program with adequate training or experience	3.90	4.25
Staff stay at our program for a long time	4.18	4.07
We have enough staff and/or student-to-staff ratios are good	4.39	4.54
New staff get an adequate orientation	4.27	4.33
Staff have enough time to attend meetings or do planning	4.04	4.35
Staff are designing and delivering activities consistent with program goals and objectives for students	4.44	4.58

Data Source: Project Director/ Site Coordinator Survey

Table 9 – Job Satisfaction Scale Item Scores

<i>PROMPT: Please rate the extent to which the following statements are true for you (1=Almost never true, 3=True about half of the time, 5=Almost always true).</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Job Satisfaction	4.19	4.41
In most ways, this job is close to my ideal	4.14	4.42
The condition of my current job is excellent	4.27	4.44
I am satisfied with this job	4.37	4.41
If I could change my career so far, I would not change anything	3.99	4.26

Figure 7 - Leading Indicator 1.2 - Continuous Improvement

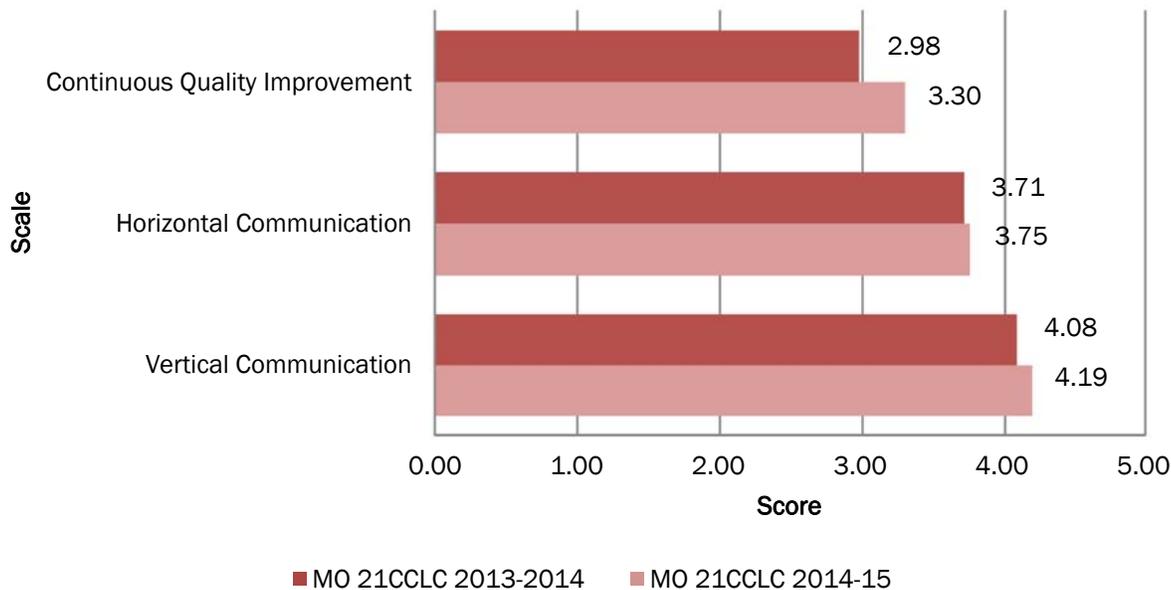


Table 10 – Continuous Improvement Scale Item Scores

	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Continuous Quality Improvement	2.98	3.30
<i>Please select one response for each statement (1=No, 5=Yes).</i>		
Are you currently using the Youth Program Quality Assessment (YPQA) from High/Scope as a quality assessment tool and/or any other quality assessment tool that employs observation and written evidence to produce quality ratings at your site?	N/A	3.02
Are you currently using any other quality assessment tool that employs observation and written evidence to produce quality ratings (Examples: NYSAN, SACERS, APT)? [2013-14 score includes use of PQA]	2.31	2.00
<i>In the past year or so at your program, how often have you: (1=Never, 5=At least once)</i>		
Observed staff sessions with youth to assess quality?	2.89	3.76
Collected written anecdotal evidence on program quality?	2.66	3.56
Conducted program planning using quality assessment data?	2.92	3.76
<i>How much training have you had on the following during the past year? (1=Never, 5=At least once) *</i>		
Weikart Center PQA Basics or Youth Work Methods	1.79	N/A
Search Institute Developmental Assets	2.30	N/A
Advancing Youth Development	2.33	N/A
4-H Youth Development Academy (YDA)	N/A	1.48

MOSAC2 Youth Development Credential (YDC)	N/A	1.67
Other training re positive youth development	3.39	3.92
<i>Please select the response that most nearly represents how often the following practices occur in your program (1=Never, 3=Every few months, 5=At least weekly).</i>		
My supervisor gives me helpful feedback about how I work with youth	3.98	4.06
My supervisor is visible during the offerings that I lead or co-lead	4.28	4.28
My supervisor knows what I am trying to accomplish with youth	4.49	4.58

Data Source: Direct Service Staff Survey *Survey asked about different training offerings in 2013-14 and 2014-15

Table 11 – Horizontal Communication Scale Item Scores

<i>PROMPT: Please select the response that most nearly represents how often the following practices occur in your program (1=Never, 3=Every few months, 5=At least weekly).</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Horizontal Communication	3.71	3.75
I co-plan with another member of staff	3.95	4.01
I discuss teaching problems or practices with another staff member	4.38	4.38
A co-worker observes my session and offers feedback about my performance	3.44	3.39
I work on plans for program policies or activities with other staff	3.66	3.82
I observe a co-worker's session and provide feedback about their performance	3.15	3.16

Data Source: Direct Service Staff Survey

Table 12 – Vertical Communication Scale Item Scores

<i>PROMPT: Please select the response that most nearly represents how often the following practices occur in your program (1=Never, 3=Every few months, 5=At least weekly).</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Vertical Communication	4.08	4.19
My supervisor challenges me to innovate and try new ideas	3.90	4.06
My supervisor makes sure that program goals and priorities are clear to me	4.26	4.33

Data Source: Direct Service Staff Survey

Instructional Context

Figure 8 - Leading Indicator 2.1 - Academic Press

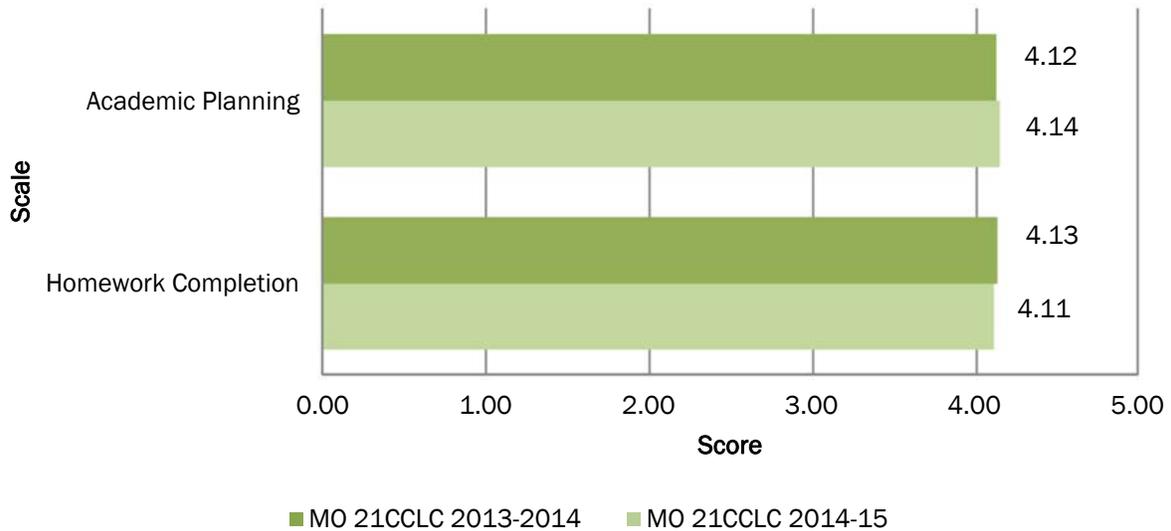


Table 13 – Academic Planning Scale Item Scores

<i>PROMPT: When you lead sessions focused on reading, mathematics, and science, how true are the following statements? (1=Never true, 3=True about half of the time, 5=Always true)</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Academic Planning	4.12	4.14
The session is planned in advance and written out in a lesson plan format	4.04	3.98
The session is targeted at specific learning goals for the individual student, or for a school curriculum target or for a specific state standard	4.23	4.30
The session builds upon steps taken in a prior activity or session	4.14	4.17
The session is based on recent feedback from students about where they need support	3.99	3.99
The session combines academic content with the expressed interests of students	4.23	4.27

Data Source: Direct Service Staff Survey

Table 14 – Homework Completion Scale Item Scores

<i>PROMPT: When you think about your experience in this afterschool program, how true are the following statement for you? (1=Almost never true, 3=True about half of the time, 5=Almost always true)</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Homework Completion	4.13	4.11
I get my homework done when I come to the afterschool program	4.02	3.99
The staff here understand my homework and can help me when I get stuck	4.25	4.19
I learn things in the afterschool program that help me in school	4.10	4.10

Figure 9 - Leading Indicator 2.2 - Engaging Instruction



Table 15 – Youth Engagement and Belonging Scale Item Scores

<i>PROMPT: When you think about your experience in this afterschool program, how true are the following statement for you? (1=Almost never true, 3=True about half of the time, 5=Almost always true)</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Youth Engagement and Belonging	4.16	4.12
I am interested in what we do	4.20	4.09
The activities are important to me	4.10	3.95
I try to do things I have never done before	4.10	4.07
I am challenged in a good way	4.18	4.12
I am using my skills	4.37	4.29
I really have to concentrate to complete the activities	3.95	3.98
I feel like I belong at this program	4.24	4.24
I feel like I matter at this program	4.17	4.14

Data Source: Youth Survey

Table 16 – Growth and Mastery Skills Scale Item Scores

<i>PROMPT: Please indicate the proportion of students in your program for which the following goal statements are true (1=Almost none, 3=About half, 5=Almost all).</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Growth and Mastery Skills	3.82	3.94
We will expose students to experiences which are NEW FOR THEM	4.08	4.14
Students will have responsibilities and privileges that INCREASE OVER TIME	4.14	4.15
Students will work on GROUP PROJECTS THAT TAKE MORE THAN FIVE SESSIONS to complete	3.05	3.29
All participating children and youth will be acknowledged for achievements, contributions and responsibilities	4.28	4.33
At least once during a semester students will participate in SEQUENCE OF SESSIONS where TASK COMPLEXITY INCREASES to build explicit skills	3.43	3.68

Students will identify a skill/activity/pursuit that THEY FEEL they are uniquely good at	3.93	4.05
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Data Source: Direct Service Staff Survey

Table 17 – Instructional Quality Scale Item Scores

<i>PROMPT: Please indicate the proportion of students in your program for which the following goal statements are true (1=Almost none, 3=About half, 5=Almost all).</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Instructional Quality	3.71	3.77
Supportive Environment	4.27	4.38
Interaction	3.77	3.83
Engagement	3.21	3.24

Data Source: Youth PQA & School-Age PQA

External Relationships

Figure 10 – Leading Indicator 3.2 - Family Engagement

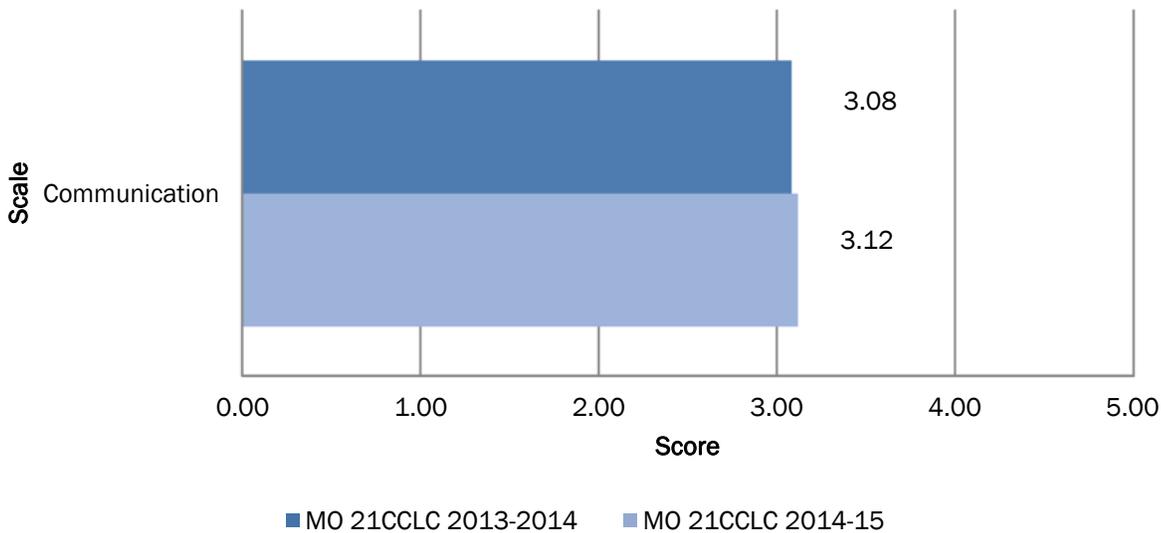


Table 18 – Communication Scale Item Scores

<i>PROMPT: For the past school year, how true are the following statements for you? (1=Almost never true, 3=True about half of the time, 5=Almost always true)</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Communication	3.08	3.12
On at least a monthly basis an adult in our family receives information at home or attends a meeting about the afterschool program	3.57	3.64
Each semester an adult in our family talk on the phone or meets in person with afterschool staff to receive detailed information my child's progress in the program	3.33	3.24
An adult in our family has been personally recruited to participate in and/or lead sessions at the afterschool program	2.32	2.48

Data Source: Parent Survey

Figure 11 - Leading Indicator 3.3 - School Alignment

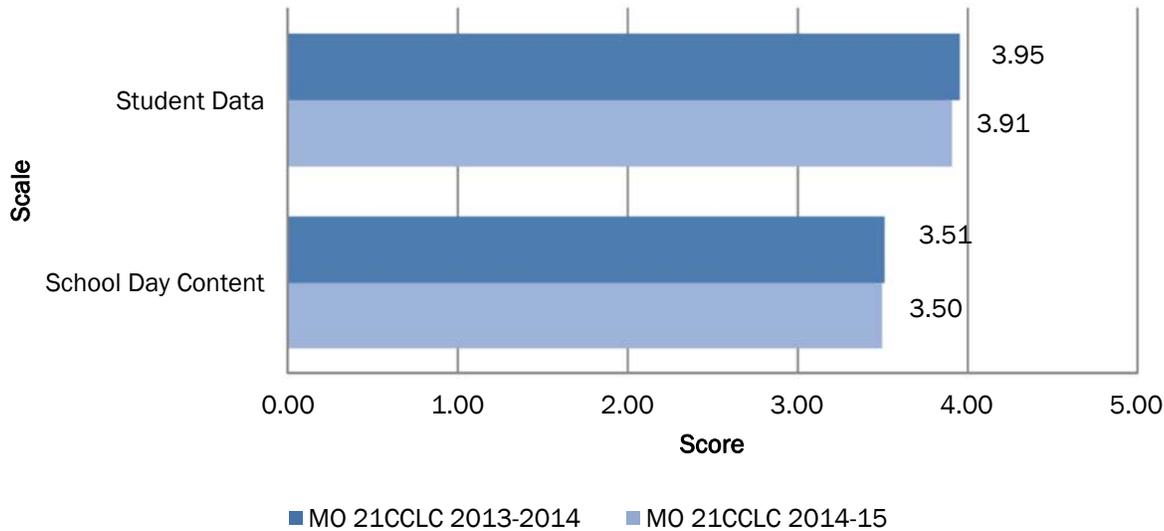


Table 19 – Student Data Scale Item Scores

<i>PROMPT: Please indicate the proportion of students in your program for which the following statements are true (1=Almost none, 3=About half, 5=Almost all).</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
Student Data	3.95	3.91
Each year we review achievement test scores and or grades from the previous year OR have online access to grades	4.28	4.29
We receive student progress reports from school-day teachers during the current year	3.86	3.70
We review diagnostic data from the current school year for individual students	3.72	3.73

Data Source: Project Director/Site Coordinator Survey

Table 20 – School Day Content Scale Item Scores

<i>PROMPT: When you lead academic sessions or coordinate academic learning in the afterschool program, indicate the proportion of students for which the following statements are true (1=Almost none, 3=About half, 5=Almost all).</i>	MO 21CCLC 2013-2014 (N=154)	MO 21CCLC 2014-15 (N=162)
School Day Content	3.51	3.50
I know what academic content my afterschool students will be focusing on during the school day on a week-to-week basis	3.99	4.06
I coordinate the activity content of afterschool sessions with students' homework	3.83	3.81
I help manage formal 3-way communication that uses the afterschool program to link students' parents with school-day staff and information	3.53	3.54
I participate in meetings for afterschool and school day staff where linkages between the school day and afterschool are discussed and/or where academic progress of individual students are discussed	3.41	3.36
I participate in parent-teacher conferences to provide information about how individual students are faring in the afterschool program	2.71	2.71

Data Source: Project Director/Site Coordinator Survey & Direct Service Staff Survey

Goal 3: College/Career Readiness

The objectives for Goal 3 provide site-level benchmarks addressing the extent to which sites are helping youth develop the skills needed to be successful in their transition to college and/or career participation. As discussed earlier in the report, Objectives 3.1 and 3.3 are not addressed because the data were not available for this year's report. Table 21 shows how sites performed on these objectives statewide. Note that only sites with at least three responses were included. The Personal and Social Skills and Commitment to Learning scales used for Objectives 3.4 and 3.5 were modified, thus comparisons with last year's data are not recommended.

Table 21 – Performance on Goal 3 Objectives

Objective	Percent of sites meeting objective	Mean site percent	Range
3.2—At least 50% of total youth enrolled in the afterschool program per site will have at least 60 days of attendance in the afterschool program.	53.1% (n = 158)	47.9%	0-100%
3.4- At least 70% of youth per site will indicate a medium to high level of personal and social skills as measured by the youth outcomes survey (average score of 3.5 or higher).	97.5% (n = 156)	89.5%	0-100%
3.5- At least 70% of youth per site will indicate a medium to high level of commitment to learning as measured by the youth outcomes survey (average score of 3.5 or higher).	94.3% (n = 157)	89.8%	0-100%

Data Source: Youth Survey

Key Points:

- A majority of sites (53%) met the 60-day attendance benchmark, leaving 47% that did not.
- As shown in Figure 12, the percent of programs meeting the 60-day benchmark increased from 2013-14 to 2014-15. Figure 12 also shows the percentage of sites that would meet the benchmark if it were changed to 30 days.
- Nearly all sites met the benchmark established by DESE for youth reporting on their own personal/social skills and commitment to learning.

Figure 12 – Programs Meeting 30-Day and 60-Day Attendance Benchmarks over Time

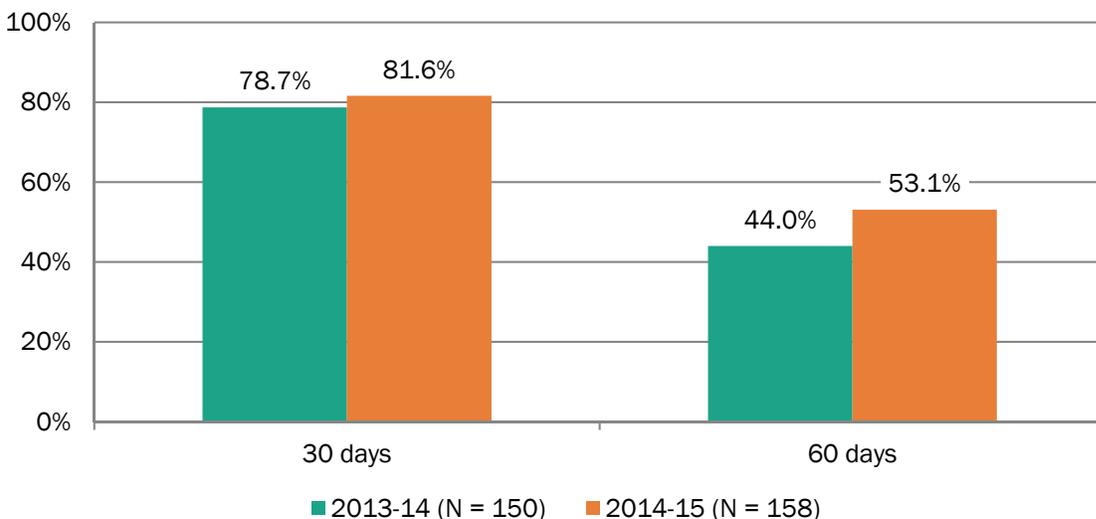


Table 22 shows how youth scored statewide on the items that comprise the Personal and Social Skills Scale and Table 27 shows scores on the Commitment to Learning Scale. Two versions of the Personal and Social Skills Scale and Commitment to Learning Scale were developed: one for youth in kindergarten-2nd grade, and another for older youth (3rd grade and above). The

older youth scales contained all the same items as the younger youth scales but added items to assess more sophisticated skills and attitudes. Items that were only on the older youth scale are asterisked in the following tables.

Table 22 – Detailed Item Scores on Personal and Social Skills Scale (Youth)

PROMPT: For the past school year, how true are the following statements for you? (1 = Almost never true; 3 = True about half the time; 5 = Almost always true)	Statewide average (n's differ by item; about 9830 youth)
Personal and Social Skills Scale (Youth)	4.37
I work well with other kids.*	4.19
I can make friends with other kids.*	4.47
I can tell other kids that they are doing something I don't like.	4.18
I am a good listener.	4.31
I can stay friends with other kids.*	4.40
I follow the rules in my classroom.	4.44
I make good use of my time at school.	4.34
I finish my work on time.	4.30
I keep track of my things at school.	4.35
I get along with adults.	4.42
I usually behave well.	4.42
I take responsibility when I make a mistake.	4.42
I am good at using many different strategies to complete a task or a project.*	4.28
It is easy for me to stay focused on projects that last more than one week.*	4.06
I set goals for myself.*	4.18
I show respect for others.	4.51
I know who I can go to if I need help.	4.61
I like to work with others to solve problems.	4.32
I have friends who care about me.	4.56

Data Source: Youth Survey

Note. Items with asterisks were only on the older youth (3rd-12 grade) survey.

Key Points:

- In general, youth report strong skills in all domains of personal and social skills, including communication, relationships with others, responsibility, and planning.
- Some of the lowest scoring items addressed executive skills and goal setting (*It is easy for me to stay focused on projects that last more than one week; I set goals for myself*).
- Most youth reported feeling relatively less confident in asserting themselves in social situations (*I can tell other kids when they are doing something I don't like*).
- The highest scoring items addressed positive social abilities (*I show respect for others; I have friends who care about me; I know who I can go to if I need help*).

Table 23 shows how youth scored statewide on the items that comprise the Commitment to Learning Scale.

Table 23 – Detailed Item Scores on Commitment to Learning Scale

PROMPT: For the past school year, how true are the following statements for you? (1 = Almost never true; 3 = True about half the time; 5 = Almost always true)	Statewide average (n's differ by item; about 9830 youth)
Commitment to Learning Scale (Youth)	4.41
I get my homework done when I come to the afterschool program.*	3.96
Doing well in school will help me when I grow up.*	4.63
I do my homework in the afterschool program or at home.	4.42
I come to school ready.	4.51
I like to learn new things.	4.50
I pay attention in class.	4.36

Data Source: Youth Survey

Note. Items with asterisks were only on the older youth (3rd-12 grade) survey.

Key Points:

- In general, youth reported relatively good work habits and positive school engagement.
- The highest scoring items reflect awareness of the importance of school (*Doing well in school will help me when I grow up*) and positive school engagement (*I come to school ready* and *I like to learn new things*).

Recommendations

The findings presented above highlighted a few key areas where it may be beneficial to do some further investigation and reflection. The recommendations below serve as a starting point for further examination. In addition, other recommendations are provided to enhance the overall evaluation process.

- ❖ The state lead should strongly consider improving the Missouri 21st CCLC quality improvement system in the following ways:
 - For long-term grantees (with grants of 3 or more years) mandate the inclusion of program self assessment using the School-Age PQA Walkthrough Method and/or the STEM PQA as a way to enhance sustainability.
 - Provide site-level technical assistance to help programs close the gender gap in reading interest and self-efficacy for youth grades 3-12, including strategies aimed at engaging boys in positive reading experiences. Boys consistently report lower self-efficacy in reading and communication arts, particularly starting in middle school.
 - In a pilot group of sites, add a very brief afterschool teacher behavioral rating of social and emotional skills, such as the DESSA Mini, implemented at two time points to demonstrate growth over the school year and to allow the evaluator to conduct analyses linking afterschool quality to social and emotional learning growth for all students and more at-risk subgroups.
 - Consider using standardized assessment data that schools typically gather as another way to measure academic achievement in reading, math, and science, given the status of the state assessment tool (which likely will not be given two years consecutively until 2018). Similar to grades, pre- and post-scores could be used to document growth. Normal curve equivalents (NCEs) could be used to equate scores across assessments.
 - Consider standardizing the time points are used for pre- and post-grades for all subject areas. Currently, sites are allowed to choose which grades are counted as pre and post. By standardizing the time points, one source of potential “error variation” is eliminated, thereby enhancing the reliability and validity of the grade change data. It is still acknowledged that grades are imperfect indicators of academic achievement at a system level due to the variation in grading systems used across schools.

- ❖ The following recommendations are to improve program design across 21st CCLC projects in Missouri. DESE/MASN may want to provide specific training and technical assistance for grantees to implement these best practices.
 - The state lead may want to guide grantees on a process for fostering successful and positive communication with external stakeholders such as parents, school-day personnel, and other community members. When information is shared across contexts, it creates a complementary learning environment that supports the development of students (Catalano, Haggerty, Oesterle, Fleming, & Hawkins, 2004; Weiss, Little, Bouffard, Deschenes, & Malone, 2009).
 - Consider identifying exemplar grantees who have been effective communicators with parents and community members. These exemplars could share their methods as a webinar or at a statewide network meeting. Ask exemplar grantees to deliver content in a learning webinar that focuses on how to get parents and community members more engaged in programming.
 - Also consider suggesting to grantees that sites identify a specific “point person” to facilitate communication with the school and with parents. This will establish a single individual who can be identified by both families and schools as a dedicated liaison. This individual will also serve the program as an informant for student progress and targeted need. The unique structure and more holistic developmental purpose of the afterschool program make afterschool staff especially well-positioned to mediate these entities (Harris, Rosenberg, & Wallace, 2012; Hill & Taylor, 2004; Hill & Tyson, 2009; Smith, Hillaker, Garner, & McGovern, 2015).
 - Youth voice is important in establishing a sense of ownership of the afterschool program for middle and high school youth. Opportunity to incorporate youth voice is a central feature of both the Interaction and Engagement domains of the quality measures used in the Missouri 21st CCLC QIS. Fostering youth voice involves finding ways for young people to actively participate in shaping the decisions that affect their lives (Mittra, 2004) and helping youth to develop and realize their own goal, interests and values (Assor, Kaplan, & Roth, 2002; Connell & Wellborn, 1991; Reeve, Jang, Carrell, Jeon, & Barch, 2004).

- The state lead may want to guide grantees on establishing youth advisory boards, panels, or councils that will be able to participate in these and other organizational decisions regarding programming for middle school and high School-Age youth.
 - Improvement in the instructional quality domains of Engagement and Interaction from 2013-14 to 2014-15 on the program quality assessment tools (see Table 21) and improvement across all items of Youth Governance (Leading Indicator 1.3, see Appendix C) suggest targeted improvement focus in the area of Youth Voice during the 2014-15 programming year.²
 - An important pathway to skill development is involving students in engaging activities that sequentially grow more complex over time (Durlak & Weissberg, 2007; Marzano, 1998). The state lead may want to guide grantees to implement programming that has a larger goal or end product and takes multiple sessions to complete. STEM or art activities may be a great way to build in multi-session projects.
 - Increasing task complexity, (see Table 20, Growth and Mastery Skills) indicated 7% improvement over 2013-14 program year.
 - Encourage the use of lesson planning for afterschool sessions. For example, create themes to cover a specific amount of time (days, weeks, semesters) with specific learning objectives that build from one session to the next.
- ❖ Given the importance of dosage to enhancing youth outcomes, it is recommended that DESE further explore the attendance data in order to determine what factors, both student-level and program-level, are associated with higher afterschool attendance.
 - Enhance current information on afterschool dosage by planning for ways to capture afterschool attendance in terms of individual-level total days attended, hours attended, and time in type of activity (e.g., minutes spent coding, working on science homework). Alternatively, the state could implement other data-tracking systems that have the capability of doing so.
 - Consider changing the benchmark for Objective 3.2 to 30-day attendance instead of 60-day attendance, which would result in more sites meeting the objective.

² Sample inconsistencies from year to year (e.g., changes in staff, participating youth, and in some cases site location) and fundamental differences between baseline implementation and subsequent implementation years make specific and direct comparisons of scores across the 2013-14 and 2014-15 program years problematic, however score growth is encouraging and may suggest targeted improvement efforts in the noted area.

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Appendix A: Technical Detail on Reliability of Measures

The evaluation framework is comprised of multiple, nested levels of measurement that are organized under three statewide evaluation goals and their corresponding objectives. Table A1 provides descriptive information for the 32 scales including the number of items that comprise each scale, the source of the items, the scale mean, standard deviation and skew which describes the shape of the distribution of site scores for each scale. Descriptive information for the additional scales developed by OSEDA and MASN for the statewide evaluation is also included. In general, scales with skew coefficients between +/- 2 are considered in the acceptable range. Table A1 also provides reliability information for the 32 scales. Internal consistency (Cronbach's alpha or α) is an item level intra-class correlation that describes the degree to which the items that make up a scale are more highly correlated within each respondent than across respondents and $\alpha \geq .7$ is typically seen as the acceptable range.

Two additional intra-class correlations (ICC (1) and ICC (2)) are provided in the final two columns of Table A1 and these coefficients describe the reliability of multiple staff and youth reports from the same program site in terms of the degree of agreement between respondents within the same program site. In general, higher levels of agreement among respondents in the same program site are required to meaningfully interpret an average score for multiple respondents in the same program site. ICC (1) can be understood as the reliability of a rating from a single respondent and the proportion of scale score variance explained by differences between sites. ICC (2) describes the reliability of the scale mean for each site by taking into account the number of additional raters included in the mean scale score (Bliese, 2000). In general, ICCs (1) and (2) indicate that there is relatively high agreement within program sites and that program site means can be meaningfully interpreted.

ICCs (1) and (2) were calculated using variance estimates from one-way ANOVA with random effects model for the data with each scale as the dependent variable and the site ID as the factor. The formulas for each are provided in Figure A1 where MSB is the scale score variance accounted for between sites, MSW is the scale score variance accounted for within sites and K is the average number of staff, youth or parents contributing to the mean scale score for that site.

Figure A1. Calculating Formulas for Intraclass Coefficients

$$ICC(1) = \frac{MSB-MSW}{MSB+[(k-1)*MSW]}$$

$$ICC(2) = \frac{k(ICC(1))}{1+(k-1)ICC(1)}$$

Table A1. Descriptive and Reliability Information for Scale Scores

	Number of Items	Source*	Mean	SD	Skew	Cronbach's Alpha	ICC (1)	ICC (2)
Goal 1								
Common Instrument Science Survey	10	Y	3.24	0.64	-.89	0.90	0.09	0.80
Goal 2								
1.1 - Staffing Model								
Capacity	6	SC	4.35	0.66	-1.18	0.84	0.03	0.64
Job Satisfaction	4	SC,S	4.40	0.70	-1.36	0.93	0.02 ³	0.61
1.2 - Continuous Improvement								
Continuous Quality Improvement	14 ⁴	S	3.29	0.44	-0.10	0.77	0.00	0.58
Horizontal Communication	5	S	3.75	.73	-.59	0.91	0.00	0.57
Vertical Communication	2	S	4.19	.64	-1.41	0.88	0.00	0.50
1.3 - Youth Governance								
Youth Role in Governance	5	SC	2.81	.84	.49	0.83	0.00	0.22
1.4 - Enrollment Policy								
Access	4	SC	3.00	.77	.27	0.45	0.01	0.44
Targeting Academic Risk	4	SC	2.31	.99	.77	0.84	0.01	0.48
2.1 - Academic Press								
Academic Planning	5	S	4.14	.54	-.99	0.88	0.00	0.41
Homework Completion	3	Y	4.11	.45	-1.31	0.80	N/A	N/A
2.2 - Engaging Instruction								
Youth Engagement & Belonging	8	Y	4.12	.35	-.51	0.92	N/A	N/A
Growth & Mastery Skills	6	S	3.94	.52	-.18	0.90	0.00	0.50
Instructional Quality	3	PQA	3.77	.63	-.43	0.73	N/A	N/A
3.1 - System Norms								
Accountability	3	SC	4.68	.45	-1.34	0.60	0.00	0.35
Collaboration	2	SC	4.56	.68	-1.89	0.65	0.00	0.33
3.2 - Family Engagement								
Communication	3	P	3.12	.74	-.16	0.84	N/A	N/A
3.3 - School Alignment								
Student Data	3	SC	3.91	1.17	-.83	0.85	0.04	0.71
School Day Content	5	SC,S	3.50	.71	-.41	0.84	0.00 ⁵	0.36
3.4 - Community Engagement								
Community Engagement	4	SC	2.94	1.05	.11	0.81	0.00	0.20
4.1 - Socio-Emotional Development								
Social & Emotional Competencies	3	Y	4.30	.24	-.73	0.81	N/A	N/A
4.2 - Academic Efficacy								
Work Habits	4	Y	4.35	.27	-1.23	0.92	N/A	N/A
Reading/English Efficacy	2	Y	4.03	.35	-.32	0.78	N/A	N/A
Math Efficacy	2	Y	4.07	.48	-1.09	0.93	N/A	N/A
Science Efficacy	2	Y	4.16	.37	-.84	0.94	N/A	N/A
Technology Efficacy	2	Y	4.28	.39	-.90	0.93	N/A	N/A
Academic Efficacy (parent)	4	P	4.00	.54	-.88	0.94	N/A	N/A
5.1 - Family Satisfaction								
Confidence in Care	3	P	4.71	.27	-1.29	0.83	N/A	N/A
Convenience of Care	2	P	4.69	.29	-1.51	0.62	N/A	N/A
Family-School Connection	3	P	4.16	.52	-1.08	0.83	N/A	N/A
Goal 3								
Personal and Social Skills - Youth	19	Y	4.37	0.64	-1.41	0.92	0.06	0.79
Commitment to Learning - Youth	6	Y	4.41	0.72	-1.73	0.75	0.07	0.81

*SC=Site coordinator survey; S=Staff survey; Y=Youth survey; P=Parent survey.

³ ICC represents the average value of Job Satisfaction for Staff and Job Satisfaction for Site Coordinators

⁴ Three items no data collected: PQABas;PWD;YWM, so for this reliability only 11 items were included

⁵ ICC represents the average value of School Day Content for Staff and School Day Content for Site Coordinators

Appendix B: Profiles of High- and Low-Performing Sites

In this appendix we examine the prevalence of “low performance”⁶ defined as assignment to the low quartile on one or more of 23 leading indicator scale scores. The 10 student outcome scales were excluded from this analysis. We examined the difference between group mean scores for the highest and lowest quartile groups on each scale. We also conducted a statistical significance test of the difference using an independent subjects T-test. Table B1 describes the results of these analyses including p-values indicating statistical significance of the difference. Statistically significant differences between high and low quartile means scores are indicated for all scales presented.

Table B1 – Comparison of Group Means for High and Low Quartiles

	# Sites in High Quartile 2014-15	High Quartile Mean 2014-15	# Sites in Low Quartile 2014-15	Low Quartile Mean 2014-15	Mean Score 2014-15	Difference High/Low Quartile Means	P value
Capacity	38	5.00	58	3.50	4.36	1.50	0.00
Job Satisfaction	55	5.00	55	4.00	4.41	1.00	0.00
Continuous Imp	40	4.35	37	2.98	3.74	1.37	0.00
Horizontal Comm.	37	4.63	37	2.75	3.75	1.88	0.00
Vertical Comm.	42	4.84	36	3.30	4.19	1.54	0.00
Youth Governance	31	3.93	38	1.93	2.81	2.00	0.00
Access	40	3.95	36	2.00	3.00	1.95	0.00
Targeting	35	3.71	42	1.27	2.31	2.44	0.00
Academic Planning	37	4.74	37	3.39	4.14	1.35	0.00
Hwk Completion	42	4.65	55	3.36	4.11	1.29	0.00
Yth. Eng. & Belong	40	4.54	37	3.66	4.12	0.88	0.00
Growth & Mastery	37	4.59	36	3.23	3.94	1.36	0.00
Instructional Quality	41	4.50	39	2.90	3.77	1.60	0.00
Accountability	78	5.00	37	3.99	4.68	1.01	0.00
Collaboration	82	5.00	37	3.59	4.56	1.41	0.00
Communication	35	4.00	33	2.13	3.12	1.87	0.00
Student Data	49	5.00	38	2.21	3.91	2.79	0.00
School Day Content	40	4.33	39	2.56	3.50	1.77	0.00
Community Engage	38	4.29	79	2.14	2.94	2.15	0.00
Acad. Eff. Parent Rep	33	4.60	68	3.60	4.00	1.00	0.00
Confidence in Care	34	4.98	34	4.34	4.71	0.64	0.00
Convenience of Care	34	4.97	34	4.31	4.69	0.66	0.00
Family-School Conn	35	4.70	32	3.42	4.16	1.28	0.00

⁶ It is important to note that this is the baseline year of data collection for a new evaluation framework. It may be possible to see a higher prevalence of “low-performing” sites during this year of data collection, with the expectation that in ongoing years of data collection, that prevalence would decline.

A risk index was created to identify membership in low quartile groups. For each scale we created a risk variable where 1= membership in the lowest quartile and 0= membership in one of the higher quartiles. We then summed across the 23 possible risk variables to create the risk index ranging between 0 and 23. Figure B1 illustrates the prevalence of low performance across sites. Risk Index Scores range from zero to 13, meaning that some sites had zero scales for which their scores were in the lowest quartile (out of 23), while some sites had as many as 13 scales. Here, it is important to note that even though sites are placed in a low quartile, it does not necessarily mean they have received a low aggregate score on an indicator. Quartile membership is based upon scores relative to other sites.

Figure B1 – Risk Index Score by Number of Sites



Appendix C: Logic Model for Missouri's Afterschool Programs Including Improvement Strategies, Evaluation Goals, and Measures

