SUMMER LEARNING ONLINE TOOLBOX
YEAR FOUR REPORT

May 1, 2014 to December 31, 2014

A Report to the
David and Lucile Packard Foundation

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EXECUTIVE SUMMARY

This report presents findings from the fourth year of the Summer Learning Outcome Measures Project carried out by the University of California Irvine with funding from the David and Lucile Packard Foundation. The Year Four (2014) Implementation of the Summer Online Toolbox included programs that are affiliated with Summer Matters and non-affiliated programs. In Year Four, all programs were afforded the option of receiving expanded analyses related to program attendance and student demographic data.

PARTICIPATION

- Nine programs operated at 48 sites participated in the 2014 data collection. Seven programs were part of the Summer Matters Initiative (Fresno, Gilroy, Los Angeles, Sacramento, San Bernardino, San Francisco, and Whittier) and two programs were not affiliated with Summer Matters (Building Futures Now of Ravenswood City School District and Boys and Girls Clubs of Stanislaus County)

REPORTS OF SCORES: SKILL DEVELOPMENT AND BEHAVIOR

- A total of 2,529 elementary, middle school, and high school students completed self-reports of 1. Skill Development (Work Habits, Reading Efficacy, Math Efficacy, and Science Efficacy), 2. Attitudes and Beliefs (Science Interest, Science Career, and View of Future), and 3. Behavior (Social Competencies and Misconduct).
- The student scores show that the majority of elementary and middle/high school students self-reported good or excellent scores in the areas of work habits, reading efficacy, math efficacy, science efficacy, social competencies, and misconduct.

ASSOCIATIONS BETWEEN PROGRAM EXPERIENCES AND REPORTS OF SKILL DEVELOPMENT, ATTITUDES AND BELIEFS, AND BEHAVIORS

- At the end of their summer program students were asked to report the quality of their experiences at their program site. Three aspects of program experiences were measured: Relationships with Staff, Interests in Program Activities, and Quality of Relationships with Peers.
- Students' reports of higher quality program experiences were associated with self-reported skills and behavior.
  - Higher quality relationships with staff was linked to less misconduct and better work habits, reading efficacy, math efficacy, science efficacy, and social competencies.
  - Higher quality program activities also was linked to less misconduct and better work habits, reading efficacy, math efficacy, science efficacy, and social competencies.
  - Higher quality experiences with peers was also linked to less misconduct for elementary students and better work habits, reading efficacy, math efficacy, science efficacy, and social competencies in both age groups.

PROGRAM ATTENDANCE

  - Attendance data were obtained from eight program sites. This attendance data indicated high levels of participation in the Summer Matters programs, averaging

139 hours for elementary students and 119 hours for middle school students. This is an excellent level of attendance.

- Program attendance was found to relate to youth reports of math and science efficacy and to greater youth interest in the program activities. These findings underscore the value of programs devoting time and resources to collecting attendance data.

PROGRAM DIRECTORS' FEEDBACK AND UC IRVINE RESPONSE
- In Fall 2014, UC Irvine contacted the program directors to solicit their feedback about the utility of the 2014 customized program report and their assessment of benefits and usefulness of the information provided.

- Five programs indicated ways in which the data were useful in reporting to funders, communicating to stakeholders and informing their program improvement efforts.

- Three noted that the presentation of the information in reports was "well organized" and "easy to read and understand". Others commented that the results section was challenging to interpret.

- All of the programs were able to identify how they could use the data for their program quality improvement efforts and provided recommendations about how the Online Toolbox could be modified to better serve program assessment needs and ways to improve the program report, specifically more flexibility in choosing the scales to administer.

IMPLICATIONS
The use of the Summer Learning Toolbox by Summer Matters programs over the course of four years (2011 to 2014) has shown the value of collecting program quality and youth outcome data, which programs have indicated, can be used to inform their program improvement efforts. Allowing for flexibility in the selection of scales that best reflect program goals and creating reports that program directors and their staff can easily interpret will improve the usability of the Toolbox. These changes will allow programs to apply the information in the reports towards their efforts to better address students' interests and learning needs.

Project Overview

This report presents findings from the fourth year of the Summer Learning Outcome Measures Project. The project involves the implementation of an online assessment tool in the summer context. The pilot (Year One) and initial field test (Year Two) of the Summer Learning Toolbox were conducted to determine the reliability, validity and feasibility of administering the summer learning outcome assessments via an online process.

During Summer 2014, student and staff surveys were administered at the beginning and at the end of the summer programs to assess students' skill development and positive behaviors. The end of summer survey also measured students' program experiences: supportive relationships with peers, supportive relationships with program staff, and interest in program activities. Programs received technical assistance via email and phone during the survey administration. Programs were provided with updates on completed surveys.

Customized reports were provided to participating programs during the Fall 2014. These reports included summary statistics for both beginning and end of summer scores. Programs were able to compare their students' performance from the beginning of summer to the end of summer program administration at the site and program level, and compare their scores to the aggregate of program scores across all Summer 2014 programs.

Four programs also submitted additional student data (program attendance, gender, ethnicity, ELL status or FRL designation) and these data were also analyzed.

Feedback from program leads on the reports they received was collected by UC Irvine researchers by phone and online and is summarized in the next section.

Program Participation

A total of nine programs and 48 sites participated in the 2014 Summer Learning Outcome Measures Project. The Summer Learning Online Toolbox was made available to all Summer Learning Communities that were part of the 2014 Summer Matters Initiative. Seven of the nine programs participating in the Initiative in Summer 2014 opted to administer surveys using the Online Toolbox. In addition, two outside programs were recruited from the larger Technical Assistance network. The seven participating Summer Matters Initiative programs were: Fresno, Gilroy, Los Angeles, Sacramento, San Bernardino, San Francisco, and Whittier. The two non-Summer Matters programs were: Building Futures Now (serving Ravenswood City School District) and Boys and Girls Clubs of Stanislaus County.

Data Provided and Surveys Administered

Table 1 summarizes participation in the Summer Learning Outcome Measures Project of eight Summer Learning Communities of the Summer Matters Initiative during 2011, 2012, 2013 and 2014.

Table 1. Summer Learning Outcome Measures Online Toolbox Participation (2011-2014)

Summer Matters Program	Participation Year				2014 Participating Sites	
	2011	2012	2013	2014	Elem.	Middle
Fresno County Of Education* Fresno Recreation, Enrichment, Scholastic Help (FRESH)	Yes	Yes	Yes	Yes	1	1
Los Angeles Unified School District LA's BEST	Yes	Yes	Yes	Yes	12	
Sacramento City Unified School District Youth Development Support Services	Yes	Yes	Yes	Yes		8
San Bernardino City School District Creative Before-And-Afterschool Programs For Success (CAPS)	No	Yes	Yes	Yes	5	5
San Francisco Department of Children, Youth and Their Families* Opportunity Impact	No	No	Yes	Yes		1
Whittier City School District* Reach for the Stars	Yes	No	Yes	Yes	9	
Gilroy Unified School District* Super Power Summer Camp	No	Yes	No	Yes	2	
Santa Ana Unified School District THINK Together	Yes	No	No	No		
Non Summer Matters Programs Recruited for 2014						
Building Futures Now Serving Ravenswood City School District	No	No	No	Yes	1	1
Boys & Girls Clubs of Stanislaus County	No	No	No	Yes	1	1
TOTALS:	5	5	6	9	**9 Programs 48 sites**	

Table 2 summarizes the data collected by each of the 2014 participating programs.

Table 2. Type of Surveys Administered and Participant Data Provided, Summer 2014

Summer Matters Program	Type of Surveys Administered	Data Provided				
		Atten-dance	Grade Level	ELL/ FRL	Ethnicity	Gender
Fresno County Of Education Fresno Recreation, Enrichment, Scholastic Help (FRESH)	Student	X	X			
Los Angeles Unified School District LA's BEST	Student		X		X	X
Sacramento City Unified School District Youth Development Support Services	Student		X			X
San Bernardino City School District Creative Before-And-Afterschool Programs For Success (CAPS)	Student	X	X	X	X	X
San Francisco Department of Children, Youth and Their Families Opportunity Impact	Student Staff		X	X	X	X
Whittier City School District Reach for the Stars	Student		X			X
Gilroy Unified School District Super Power Summer Camp	Student	X	X	X	X	X
Building Futures Now Serving Ravenswood City School District	Student		X	X	X	X
Boys & Girls Clubs of Stanislaus County	Student		X	X	X	X
TOTALS:	**9 Student 1 Staff**	**3**	**9**	**5**	**6**	**7**

SECTION TWO
REPORTS OF SKILL DEVELOPMENT, BEHAVIOR, AND PROGRAM EXPERIENCES

CHAPTER ONE
STUDENT SELF-REPORTS OF SKILL DEVELOPMENT AND BEHAVIOR

A total of 2,563 student self-reports were obtained. The breakdown of reports is as follows:

- *1,546 elementary student self-reports (742 pre-participation; 804 post-participation)*
- *983 middle/high school student self-reports (526 pre-participation; 457 post-participation)*

Scores for all measures are calculated and reported as mean or average scores and as categorical designations. The mean score for each measure represents the average of all the items of that measure. In the case of negative statements or problem behaviors, lower scores represent better student outcomes.

Scores reported as categorical designations are grounded in the terminology of the specific measure (e.g. 1 = Not at all true; 2 = A little true; 3 = Mostly true; 4 = Really true"). These categorical designations indicate the proportions of students who received Low scores (1.0 to 1.9), Fair scores (2.0 to 2.9), Good scores (3.0 to 3.59), or Excellent scores (3.6 to 4.0).

PART A. STUDENT SELF-REPORTS OF SKILL DEVELOPMENT

Part A presents the scores from the student self-reports of *skill development* for elementary students (grades 3 to 6) and middle/high school students (grades 6-12). The Student Self-Report includes four measures of skill development: Work Habits, Reading Efficacy, Math Efficacy, and Science Efficacy. Measures of efficacy assess a student's sense of competency (e.g. "I expect to do well in…") and subjective task value ("I am interested in…"). All measures are rated on a 4-point response scale and an overall score for each measure is computed as the mean of the items.

Table **3.** Measures of Skill Development, Student Self-Report			
	# Items	Sample Item	4-point Rating Response
Work Habits	7	*I finish my work on time.*	1 = Not at all true; 4 = Really true
Reading Efficacy	4	*I expect to do well in reading.*	1 = Not at all true; 4 = Really true
Math Efficacy	4	*I am good at math.*	1 = Not at all true; 4 = Really true
Science Efficacy	4	*I am interested in science.*	1 = Not at all true; 4 = Really true

Elementary Students.

Table 4 summarizes the self-reported skill development scores for elementary school students. For all elementary school students in all participating programs, the mean scores are: 3.1 in work habits, 3.2 in reading efficacy, 3.3 to 3.4 in math efficacy, and 3.1 to 3.2 in science efficacy. The categorical scores show that:
- 66% of the elementary school students reported good or excellent work habits.
- 67 - 71% reported good or excellent efficacy in reading.
- 76% reported good or excellent efficacy in math.
- 68 - 72 % reported good or excellent efficacy in science.

Table 4. Elementary School Students' Self-Reports of Skill Development						
	N	Mean	% Low (1.0-1.9)	% Fair (2.0-2.9)	% Good (3.0-3.59)	% Excellent (3.6-4.0)
Work Habits						
Pre-participation	742	3.13	3.5%	30.5%	38.3%	27.8%
Post-participation	804	3.11	3.9%	30.1%	38.4%	27.6%
Reading Efficacy						
Pre-participation	742	3.16	7.7%	25.3%	30.9%	36.1%
Post-participation	801	3.17	6.4%	23.1%	34.2%	36.3%
Math Efficacy						
Pre-participation	742	3.32	6.7%	17.0%	28.7%	47.6%
Post-participation	798	3.36	4.9%	19.2%	24.8%	51.1%
Science Efficacy						
Pre-participation	741	3.14	8.5%	23.8%	29.8%	37.9%
Post-participation	798	3.22	7.0%	21.2%	29.8%	42.0%
N= number of students; Mean = average score						

MIDDLE/HIGH SCHOOL STUDENTS

Table* 5 *summarizes the self-reported skill development scores for middle/high school students. For all middle/high school students in all participating programs, the mean scores are: 3.0 to 3.1 in work habits, 2.8 to 2.9 in reading efficacy, 2.9 to 3.0 in math efficacy, and 2.9 in science efficacy. The categorical scores show that:

- 61 - 64% of the middle/high school students reported good or excellent work habits.
- 46 - 56% reported good or excellent efficacy in reading.
- 54 - 60% reported good or excellent efficacy in math.
- 56 - 57% reported good or excellent efficacy in science.

Table 5. Middle/High School Students' Self-Reports of Skill Development						
	N	Mean	% Low (1.0-1.9)	% Fair (2.0-2.9)	% Good (3.0-3.59)	% Excellent (3.6-4.0)
Work Habits						
Pre-participation	526	3.03	2.5%	36.3%	47.0%	14.3%
Post-participation	457	3.05	2.0%	34.6%	46.4%	17.1%
Reading Efficacy						
Pre-participation	526	2.78	12.2%	41.8%	28.7%	17.3%
Post-participation	457	2.93	9.4%	34.4%	33.5%	22.8%
Math Efficacy						
Pre-participation	525	2.90	15.4%	30.3%	25.3%	29.0%
Post-participation	457	3.00	12.5%	27.6%	26.0%	33.9%
Science Efficacy						
Pre-participation	525	2.88	13.0%	31.2%	30.7%	25.1%
Post-participation	457	2.90	12.5%	30.6%	28.7%	28.2%
N= number of students; Mean = average score						

PART B. STUDENT SELF-REPORTS OF ATTITUDES AND BELIEFS

Part B presents the scores from the student self-reports of ***attitudes and beliefs*** for elementary students (grades 3 to 6) and middle/high school students (grades 6-12). The Student Self-Report includes three measures of attitudes and beliefs: Science Interest, Science Career, and View of Future. Measures assess a student's attitudes (e.g. "I get excited about learning about new discoveries or inventions.") and beliefs ("I will get a job in a science-related area."). All measures are rated on a 4-point response scale and an overall score for each measure is computed as the mean of the items.

Table **6.** Measures of Attitudes and Beliefs, Student Self-Report			
	# Items	Sample Item	4-point Rating Response
Science Interest	24	*I enjoy visiting science museums and zoos.*	1 = Not at all true; 4 = Really true
Science Career	12	*I will get a job in a science-related area.*	1 = Not at all true; 4 = Really true
View of Future	7	*I will go to college.*	1 = Not at all true; 4 = Really true

ELEMENTARY SCHOOL STUDENTS

Table 7 summarizes the self-reported attitudes and beliefs scores for elementary school students. For all elementary school students in all participating programs, the mean scores are: 3.1 in science interest, 3.0 in science career, 3.7 in view of future. The categorical scores show that:
- 59 - 61% of the elementary school students reported good or excellent interest in science.
- 58 - 61% reported good or excellent aspirations toward a career in science.
- 92 - 93% reported good or excellent view of the future.

Table **7**. Elementary School Students' Self-Reports of Attitudes and Beliefs						
	N	Mean	% Low (1.0-1.9)	% Fair (2.0-2.9)	% Good (3.0-3.59)	% Excellent (3.6-4.0)
Science Interest						
Pre-participation	740	3.08	4.9%	35.8%	36.8%	22.6%
Post-participation	795	3.09	5.0%	34.3%	36.0%	24.7%
Science Career						
Pre-participation	731	2.97	7.7%	33.9%	33.1%	25.3%
Post-participation	794	2.99	9.2%	29.8%	32.7%	28.2%
View of Future						
Pre-participation	733	3.65	0.8%	7.5%	25.2%	66.4%
Post-participation	794	3.66	1.9%	4.9%	24.8%	68.4%
N= number of students; Mean = average score						

Table 8 summarizes the self-reported attitudes and beliefs scores for middle/high school students. For all middle/high school students in all participating programs, the mean scores are: 2.7 in science interest, 2.7 in science career, 3.7 in view of future. The categorical scores show that:
- 35 - 37% of the middle/high school students reported good or excellent interest in science.
- 45 - 48% reported good or excellent aspirations toward a career in science.
- 96% reported good or excellent view of the future.

Table **8**. Middle/High School Students' Self-Reports of Attitudes and Beliefs						
	N	Mean	% Low (1.0-1.9)	% Fair (2.0-2.9)	% Good (3.0-3.59)	% Excellent (3.6-4.0)
Science Interest						
Pre-participation	522	2.74	12.1%	51.3%	28.9%	7.7%
Post-participation	453	2.74	11.7%	53.2%	24.1%	11.0%
Science Career						
Pre-participation	513	2.70	11.1%	44.1%	30.6%	14.2%
Post-participation	449	2.71	13.1%	39.4%	31.2%	16.3%
View of Future						
Pre-participation	516	3.70	0.6%	3.3%	25.6%	70.5%
Post-participation	451	3.74	0.4%	3.5%	21.3%	74.7%
N= number of students; Mean = average score						

PART C. STUDENT SELF-REPORTS OF BEHAVIOR

Part C presents the scores from the student self-reports of ***behavior*** for elementary students (Grades 3 to 6) and middle/high school students (Grades 6-12).

The Student Self-Report includes two measures of behavior: Social Competencies and Misconduct (lower scores of misconduct are a positive indicator). All measures are rated on a 4-point response scale and an overall score for each measure is computed as the mean of the items.

Table **9**. Measures of Behavior, Student Self-Report			
	# Items	Sample Item	4-point Rating Response
Social Competencies	7	*I can tell other kids what I think, even if they disagree with me.*	1 = Poor; 4 = Excellent
Misconduct	9	*[In the past month, how many times have you] broken something on purpose.*	1 = Never; 4 = More than once a week

ELEMENTARY SCHOOL STUDENTS

Table 10 summarizes the self-reported behavior scores for elementary school students. For all elementary students in all participating programs, the mean scores are: 3.1 in social competencies and 1.5 to 1.6 in misconduct (lower scores are a positive indicator). The categorical scores show that:
- 61 - 63% of elementary students reported good or excellent social competencies.
- 98% were reported to have medium or low levels of misconduct.

Table **10**. Elementary School Students' Self-Reports of Behavior						
Social Competencies	N	Mean	% Low (1.0-1.9)	% Fair (2.0-2.9)	% Good (3.0-3.59)	% Excellent (3.6-4.0)
Pre-participation	741	3.09	4.2%	32.9%	43.0%	19.8%
Post-participation	798	3.06	4.3%	34.5%	42.4%	18.9%
Misconduct	N	Mean	% Low (1.0-1.9)	% Medium (2.0-2.9)	% High (3.0-3.59)	
Pre-participation	742	1.53	80.2%	18.2%	1.6%	
Post-participation	803	1.56	79.3%	19.1%	1.6%	
N= number of students; Mean = average score						

MIDDLE/HIGH SCHOOL STUDENTS

Table 11 summarizes the self-reported behavior scores for middle/high school students. For all middle/high students in all participating programs, the mean scores are: 3.1 in social competencies and 1.6 to 1.7 in misconduct (lower scores are a positive indicator). The categorical scores show that:
* 61 - 65% of middle/high school students reported good or excellent social competencies.
* 97 - 98% were reported to have medium or low levels of misconduct.

Table **11**. Middle/High School Students' Self-Reports of Behavior						
Social Competencies	N	Mean	% Low (1.0-1.9)	% Fair (2.0-2.9)	% Good (3.0-3.59)	% Excellent (3.6-4.0)
Pre-participation	525	3.06	4.2%	35.2%	41.9%	18.7%
Post-participation	457	3.14	2.6%	32.4%	41.6%	23.4%
Misconduct	N	Mean	% Low (1.0-1.9)	% Medium (2.0-2.9)	% High (3.0-3.59)	
Pre-participation	526	1.58	83.1%	14.6%	2.3%	
Post-participation	457	1.65	76.6%	20.4%	3.1%	
N= number of students; Mean = average score						

CHAPTER SUMMARY

The student scores show that the majority of elementary and middle/high school students in Summer 2014 reported good or excellent scores in all of the measures of skill development and behavior: work habits, reading efficacy, math efficacy, science efficacy, social competencies, and misconduct (lower scores of misconduct are a positive indicator).

CHAPTER 2
ASSOCIATIONS BETWEEN PROGRAM EXPERIENCES AND REPORTS OF
SKILL DEVELOPMENT, ATTITUDES AND BELIEFS, AND BEHAVIOR

This chapter presents the results of students' reports of quality of program experiences, collected during the Summer 2014 implementation of the Afterschool Outcome Measures Online Toolbox, as well as the results of analyses of associations between student-reported program experiences and reports of skill development, attitudes and beliefs, and behavior.

At the end of their summer program, students were asked to report on the quality of their experiences at their program site. The Student Self-Report of Program Experiences measure consists of 16 items, divided into three subscales: Relationships with Staff, Program Activities, and Peer Affiliation.

Table 12. Program Experiences Measure			
	# Items	Sample Item	4-point Rating Response
Relationships with Staff	6	*I trust the teachers here.*	1 = Not at all true; 4 = Really true
Program Activities	5	*I like the activities here.*	1 = Not at all true; 4 = Really true
Peer Affiliation	5	*I get to know other kids really well here.*	1 = Not at all true; 4 = Really true

STUDENT REPORTS OF PROGRAM EXPERIENCES

Table 13 shows the mean scores and categorical distributions of elementary and middle/high school students' program experiences. For all students in all participating programs, the mean scores are 3.2 to 3.3 for relationships with staff, 3.3 to 3.4 for program activities, and 3.2 to 3.3 for peer affiliation.

The categorical scores show that:
- 78% of elementary students and 68% of middle/high school students reported good or excellent quality experiences with staff.
- 72% of elementary students and 71% of middle/high school students reported that program activities were good or excellent.
- 72% of elementary students and 66% of middle/high school students reported good or excellent quality experiences with peers.

Table 13. Student Reports of Program Experiences						
	N	Mean	% Low (1.0-1.9)	% Fair (2.0-2.9)	% Good (3.0-3.59)	% Excellent (3.6-4.0)
Elementary Students						
Relationships with Staff	778	3.32	2.6%	19.0%	44.1%	34.3%
Program Activities	778	3.36	4.1%	23.8%	18.5%	53.6%
Peer Affiliation	777	3.27	5.8%	22.1%	24.3%	47.7%
Middle/High Students						
Relationships with Staff	404	3.18	3.0%	29.0%	38.4%	29.7%
Program Activities	405	3.30	4.0%	24.7%	26.4%	44.9%
Peer Affiliation	403	3.17	5.7%	28.5%	23.6%	42.2%
N= number of students; Mean = average score						

Students' reports of higher quality program experiences are associated with self-reported skills and behavior. All associations are significant (p < .001) except for one: for middle/high school students, the association between experiences with peers and misconduct is not significant.

For both elementary and middle/high school students:
- Higher quality relationships with staff was associated with less misconduct and better work habits, reading efficacy, math efficacy, science efficacy, and social competencies (p < .001).
- Higher quality program activities was linked to less misconduct and better work habits, reading efficacy, math efficacy, science efficacy, and social competencies (p < .001).
- Higher quality experiences with peers was related to less misconduct (elementary only) and better work habits, reading efficacy, math efficacy, science efficacy, and social competencies (p < .001).

Table 14 shows student-reported scores in skills and behavior, for each level of quality of program experiences.

Table **14**. Student Self-Reports of Skills and Behavior, by Quality Level of Program Experiences								
	Relationships with Staff			Program Activities			Experiences with Peers		
	Low/Fair Quality	Good Quality	Excellent Quality	Low/Fair Quality	Good Quality	Excellent Quality	Low/Fair Quality	Good Quality	Excellent Quality
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Elementary Students **(N = 777 - 778)**									
Work Habits	2.75	3.14	3.29	2.93	2.96	3.25	2.78	3.00	3.35
Reading Efficacy	2.65	3.25	3.42	2.90	2.98	3.39	2.81	3.08	3.44
Math Efficacy	3.03	3.39	3.55	3.20	3.23	3.50	3.08	3.28	3.58
Science Efficacy	2.80	3.31	3.37	2.97	3.13	3.38	2.85	3.13	3.49
Science Interest	2.67	3.18	3.27	2.90	2.95	3.26	2.74	3.02	3.36
Science Career	2.58	3.09	3.13	2.87	2.89	3.10	2.64	2.91	3.26
View of Future	3.37	3.69	3.82	3.48	3.53	3.81	3.44	3.61	3.82
Social Competencies	2.72	3.10	3.24	2.90	2.92	3.20	2.63	2.99	3.35
Misconduct	1.70	1.60	1.41	1.76	1.61	1.43	1.69	1.63	1.43
Middle/High Students **(N = 403 - 405)**									
Work Habits	2.88	3.06	3.20	2.89	2.94	3.20	2.84	3.09	3.18
Reading Efficacy	2.70	2.98	3.11	2.64	2.87	3.15	2.72	2.90	3.12
Math Efficacy	2.73	3.07	3.20	2.67	3.05	3.19	2.62	3.20	3.20
Science Efficacy	2.63	2.97	3.09	2.61	2.86	3.10	2.60	2.91	3.14
Science Interest	2.53	2.83	2.89	2.52	2.71	2.92	2.52	2.74	2.95
Science Career	2.55	2.74	2.83	2.51	2.74	2.81	2.56	2.74	2.80
View of Future	3.61	3.77	3.88	3.61	3.73	3.85	3.58	3.79	3.86
Social Competencies	2.92	3.14	3.37	2.93	3.09	3.30	2.75	3.21	3.41
Misconduct	1.84	1.62	1.50	1.82	1.65	1.56	1.70	1.67	1.61
N = number of students; Mean = average score									

CHAPTER 3
PROGRAM ATTENDANCE

This chapter presents the program attendance data, which were reported for 955 students at 8 sites in 3 programs. Relations between attendance and demographic factors were examined. And, associations between program attendance and youth outcomes were considered. As shown in Table 15, program attendance was excellent, averaging 139 hours in elementary school and 119 hours in middle/high school. There was, however, some variability in attendance.

Table **15**. Program Attendance, Elementary and Middle/High School Students				
	N	Mean, Hours	Range, Total Hours	Range, Total Days
Elementary	548	139	12 to 174 hours	20 to 33 days
Middle/High	407	119	18 to 170 hours	23 to 33 days

PROGRAM ATTENDANCE, BY GENDER, GRADE LEVEL, AND ETHNICITY
Table 16 shows the mean scores and categorical distributions of program attendance, in hours, for elementary and middle/high school students.

The categorical levels of attendance for elementary students show that:
- 76% of boys and 74% of girls attended over 125 hours.
- 83% of students in grades 3-4 and 68% of students in grades 5-6 attended over 125 hours.
- 85% of Hispanic students and 75% of Non-Hispanic students attended over 125 hours.

The categorical levels of attendance for middle/high school students show that:
- 54% of boys and 50% of girls attended over 125 hours.
- 53% of students in grades 6-7 and 49% of students in grades 8-9 attended over 125 hours.
- 83% of Hispanic students and 95% of Non-Hispanic students attended over 125 hours.

Table **16**. Program Attendance, by Gender, Grade Level, and Ethnicity							
					Hours of Attendance		
			12 - 50	51 - 100	101 - 125	126 - 150	151 - 170
Elementary Students	N	Mean	N (%)	N (%)	N (%)	N (%)	N (%)
All Elementary	548	139	15 (3%)	48 (9%)	75 (14%)	166 (30%)	244 (45%)
Boys	310	140	9 (3%)	27 (9%)	41 (13%)	89 (29%)	144 (47%)
Girls	238	139	6 (3%)	21 (9%)	34 (14%)	77 (32%)	100 (42%)
Grades 3-4	245	148	0 (0%)	20 (8%)	21 (9%)	67 (27%)	137 (56%)
Grades 5-6	303	132	15 (5%)	28 (9%)	54 (18%)	99 (33%)	107 (35%)
Hispanic	314	150	1 (0%)	24 (8%)	24 (8%)	71 (23%)	194 (62%)
Non-Hispanic	57	140	0 (0%)	6 (11%)	8 (14%)	19 (33%)	24 (42%)
Middle/High Students							
All Middle/High	407	119	24 (6%)	59 (15%)	112 (28%)	149 (37%)	63 (16%)
Boys	203	120	11 (5%)	26 (13%)	55 (27%)	84 (41%)	27 (13%)
Girls	204	119	13 (6%)	33 (16%)	57 (28%)	65 (32%)	36 (18%)
Grades 6-7	354	120	21 (6%)	51 (14%)	96 (27%)	133 (38%)	53 (15%)
Grades 8-9	53	118	3 (6%)	8 (15%)	16 (30%)	16 (30%)	10 (19%)
Grades 10-12	0	--	--	--	--	--	--
Hispanic	84	149	0 (0%)	2 (2%)	12 (14%)	27 (32%)	43 (51%)
Non-Hispanic	41	148	0 (0%)	0 (0%)	2 (5%)	19 (46%)	20 (49%)

N= number of students; Mean = average score

ASSOCIATIONS BETWEEN PROGRAM ATTENDANCE AND STUDENT REPORTS OF SKILLS, BEHAVIOR, AND PROGRAM EXPERIENCES

This section summarizes correlations and associations between program attendance and students' post-participation reports of skills, behavior, attitudes and beliefs, and program experiences. 1,261 students completed surveys at the end of their summer program (post-participation reports) and attendance data were provided for 955 students.

Of those students with post-participation scores, attendance data were provided for 453 students (183 elementary and 270 middle/high).

Comparing students with attendance data provided to students without attendance data:
- All students (elementary and middle/high) with attendance data had lower post-participation scores in work habits, reading efficacy, math efficacy, science efficacy, science interest, science career, and relationships with staff, and had higher post-participation scores in misconduct and view of future.
- Elementary students with attendance data had lower post-participation scores in science efficacy, science interest, and science career, and higher post-participation scores in program activities.
- Middle/High students with attendance data had lower post-participation scores in work habits, reading efficacy, science efficacy, and science interest.
- These findings mean that the subsample of students with attendance data provided may not be representative of the whole sample

Table 17 shows post-participation scores for elementary and middle/high school students, grouped by whether or not attendance data were provided.

Table **17**. Student Skills, Behavior, and Experiences, by Availability of Attendance Data						
	Attendance Provided (N = 453)			**Attendance NOT Provided (N = 808)**		
	All Students Mean	Elementary Mean	Middle/High Mean	All Students Mean	Elementary Mean	Middle/High Mean
Work Habits	3.01**	3.05	2.98**	3.13	3.13	3.14
Reading Efficacy	2.95**	3.13	2.82**	3.16	3.19	3.07
Math Efficacy	3.09**	3.31	2.95	3.31	3.38	3.08
Science Efficacy	2.91**	3.08**	2.80**	3.21	3.26	3.06
Science Interest	2.76**	2.94**	2.65**	3.08	3.14	2.89
Science Career	2.71**	2.80**	2.65	2.99	3.04	2.80
View of Future	3.73*	3.72	3.74	3.67	3.64	3.75
Social Competencies	3.10	3.05	3.13	3.08	3.06	3.14
Misconduct	1.65**	1.58	1.69	1.56	1.55	1.60
Relationships with Staff	3.21*	3.29	3.15	3.30	3.33	3.21
Program Activities	3.38	3.50**	3.29	3.32	3.32	3.31
Peer Affiliation	3.20	3.20	3.20	3.25	3.29	3.14
Mean = average score; * = p <.05, ** = p <.01						

Correlations between total hours of attendance and student reports of skills, behavior, and experiences:

- Correlations for all students (elementary and middle/high) were positive and significant between program attendance and math efficacy, science interest, and program activities (p < .01).
- Correlations for elementary students were positive and significant between program attendance and science interest (p < .01).
- Correlations for middle/high school students were positive and significant between program attendance and math efficacy (p < .01).

Table 18 shows correlations between total hours of program attendance and student reports of skills, behavior, and program experiences.

Table **18**. Correlations Between Program Attendance and Student Skills, Behavior, and Experiences						
Correlation Coefficients						
	All Students		**Elementary**		**Middle/High**	
Elementary Students	N	Correlation	N	Correlation	N	Correlation
Work Habits	453	.08	183	.02	270	.11
Reading Efficacy	453	.05	183	.07	270	.01
*Math Efficacy**	451	.17**	181	.12	270	.17**
Science Efficacy	451	.04	181	.01	270	.03
Science Interest	449	.12**	180	.16**	269	.05
Science Career	445	.09	180	.09	265	.07
View of Future	447	.01	180	.05	267	-.01
Social Competencies	451	.07	181	.10	270	.07
Misconduct	453	-.03	183	.03	270	-.05
Relationships with Staff	398	.04	173	.06	225	.00
Program Activities	399	.14**	173	.12	226	.13
Peer Affiliation	398	.05	173	.14	225	-.02
N= number of students; Correlation = Correlation Coefficient; * = p <.05, ** = p <.01						

For both elementary and middle/high school students, higher levels of program attendance are associated with higher scores in self-reported math efficacy (p < .05).

Table 19 shows student-reported scores in skills, attitudes, behavior, and quality of program experiences, for each level of program attendance.

Table **19**. Student Self-Reports of Skills, Behavior, and Experiences, by Level of Program Attendance						
	Elementary Students (N = 173-183) Hours of Attendance			Middle/High Students (N = 225-270) Hours of Attendance		
	12 - 100	101 - 150	151 - 174	18 - 100	101 - 150	151 - 169
	Mean	Mean	Mean	Mean	Mean	Mean
Work Habits	3.17	3.10	3.14	2.90	2.96	3.12
Reading Efficacy	2.96	3.09	3.26	2.73	2.84	2.81
Math Efficacy*	3.17	3.23	3.55	2.47	2.96	3.13
Science Efficacy	3.46	2.98	3.26	2.70	2.81	2.81
Science Interest	2.91	2.86	3.14	2.64	2.62	2.76
Science Career	2.96	2.71	2.97	2.63	2.60	2.86
View of Future	3.73	3.68	3.79	3.74	3.74	3.72
Social Competencies	2.94	3.03	3.13	3.06	3.13	3.18
Misconduct	1.51	1.57	1.61	1.79	1.70	1.62
Relationships with Staff	3.29	3.28	3.33	3.21	3.15	3.14
Program Activities	3.40	3.48	3.60	3.14	3.27	3.41
Peer Affiliation	2.98	3.15	3.36	3.32	3.20	3.14
N = number of students; Mean = average score						

All programs participating in the 2014 Summer Learning Outcome Measures Project were provided with a program report that summarized all scores for each of their sites and the mean scores for their overall program, and included summary scores for all participating summer programs. After receiving their Summer Learning Outcomes program reports—delivered to programs October 15, 2014—UC Irvine contacted the program directors to solicit their feedback on their ability to understand the results reported and their perceptions of benefits and usefulness of the information provided.

They were asked the following questions:

1) Did you find the information provided in the report on student outcomes helpful? Were the associations between program attendance and student outcomes sections of the program report presented in a way that was easy to understand? (for programs that provided attendance data).
2) In what ways do you plan to use the information in the report?
3) Do you have any suggestions for improving the program report?
4) Do you have any questions or comments about the report?

A total of seven out of nine program directors provided feedback on the program reports they received. Feedback summarized below is represented by six of the Summer Matters programs (Gilroy, Fresno, LA's BEST, Magic Zone, San Bernardino, Whittier), and one of the TA network programs (Building Futures Now of Ravenswood City). Their responses are summarized below organized by key themes that emerged.

Quality and Usefulness of Data

Programs noted a need for "good" data to demonstrate the effectiveness of their program, particularly given the current urgency to build program sustainability through the galvanizing of support from key stakeholders and the diversification of funding. Program directors (5) indicated ways in which the data were useful in reporting to funders, communicating to stakeholders and informing their program improvement efforts. Comments related to the usefulness of the program report data include:

- *Good information on student behavior and skills. The report is very useful.*

- *Our Assistant Superintendent is very data oriented. The Online Toolbox provides data that helps us identify where each site is performing.*

- *We reported some of the data points to our funders.*

- *We will be able to compare [this year's data] with next year's.*

- *I hope to gather results that will allow us to share data with stakeholders, informing them of the benefit our program provides to students. We'll also be using the Online Toolbox as our method of program evaluation for future ASES and 21st CCLC grant applications.*

Two of the three programs that provided attendance data found the information provided in the report on program attendance and student outcomes helpful. One program did not find the information on attendance useful and noted that the report was "less helpful with communicating our story to stakeholders."

Ease in Reading Report and Interpreting Results

Programs (3) noted that the presentation of the information in reports was "well organized" and "easy to read and understand", although others commented that the results section was challenging to interpret. For example:

- *The information was helpful and detailed.*

- *Some of it [the information] was helpful, but not all of it. It was helpful to see where our students scored in comparison to other programs.*

- *The first few pages describing what is measured is very helpful however becomes cumbersome with the inclusion of results.*

Use of Data for Program Quality Improvement

All seven programs were able to identify how they could use the data for their program quality improvement efforts. Specific ways that programs stated they are using or plan to use the Summer Learning outcome data are as follows:

- *Yes, we will utilize this information to inform future programming.*

- *We will use the report to restructure what we offer for enrichment and what areas we need to improve on.*

- *We used the information for some of our programming centered around relationship building and activities.*

- *We are developing a strategic plan and one of the categories is identifying barriers to student growth. I hope to be able to gather enough data to identify areas we need to place emphasis to best see student growth.*

- *[The report] was somewhat helpful with designing program. The results are a good indicator of how our youth are responding to program and thus assists us with program development and content for staff trainings.*

- *Glad we do this, it gives me a snapshot of student perceptions of the program. Allows us to meet as a leadership group and discuss where we need to focus our efforts to improve the quality of experiences for students. The Summer Learning program has been somewhat separate but it is now being more aligned with the afterschool program with Project Based Learning. These measures will help us see the differences across groups that attend [the afterschool program and the summer learning program].*

Suggestions for Improvement

In general, programs found the Online Toolbox to be "user friendly" and found benefit in receiving the reports of their program's results. Programs provided some suggestions for how the Online Toolbox might be modified to better serve their programs' assessment needs and ways to improve the program report to make it more interpretable and useful.

Online Toolbox
Comments related to selection of measures to align with specific program goals include:

- *Some survey scales don't align with the program goals. Is there the possibility that if some scales do not align, the program could have flexibility to decline to administer certain scales?*

- *It would be very helpful to tailor the survey to <u>exclusively</u> [sic] include content related to our program goals.*

- *The part that was not particularly helpful is that there were a lot of questions regarding STEM and STEM related jobs. Those were not relevant for our program, and there was no way to choose the sections that were relevant to our programming.*

- *Most of the questions were clear, but some of the questions/statements were not clear to our students. For example, one statement was about giving adults a hard time...some of our students said yes to "giving adults a hard time" but the manner in which they give adults a hard time is a joking manner and not a disrespectful manner.*

Program Report
Responses related to the organization and presentation of data in the program report include:

- *Pulling the data out of the description in Part E. and including a summary of data results below the table would be helpful. In some cases results did not demonstrate significant impact in attendance.*

- *The first few pages describing what is measured are very helpful. However it becomes cumbersome with the inclusion of results. Our preference would be to omit results from the first few pages and instead include positive share-worthy results below each table. Basically pulling data from the table that would be worthy of highlighting when speaking with stakeholders. Statements like, 'The table above demonstrates increases in reading efficacy with the greatest amount of growth from the male population'.*

- *Because we only took the pre survey, the data is not very meaningful, although it is presented out in a way that is understandable. If we had taken post evaluations and been able to compare pre and post results, that would have been helpful. I don't think I would find post only data helpful here though, which seems to be how it is presented if it exists. The comparison between pre and post is very important to me.*

- *The report could benefit from an introduction of how studies have demonstrated positive learning outcomes with relationship to social/emotional competencies and self-efficacy reports. Additionally, the report would benefit by including key findings specific to our program.*

Response to Program Feedback

The UC Irvine Online Toolbox Team is currently working to develop a new format of the program report that will address the issues noted by program directors above.

- Streamlining the program report itself (the Pdf. file they receive), by removing/editing most explanatory text and summarizing program-level results in 1-2 pages.

- Changing the formatting of the summary report, grouping measures by category and putting "results" into bullets.

- Providing scores broken down by gender and grade level.

- Providing a table of contents for all the supporting results tables, pointing to page and table numbers to find scores for specific measures (by site, gender, etc.).

- Developing an interactive version of the summary report, with "hotspots" over parts of the page that will bring up explanatory text.

- Creating a support document with example sentences for understanding the results and conveying those results to others.

- Developing an online version of the program report, which will accomplish all of the above, but provide program-specific results and options for outputting selected scores by selected groups (Note: this is something that would be developed in the upcoming year).

Further we are creating brief materials that provide context to the research base of the Online Toolbox measures and how they relate to program quality and positive youth outcomes.

SECTION FOUR
CONCLUSIONS AND IMPLICATIONS

Conclusions

The Afterschool Outcomes Online Toolbox provides an inexpensive and easy to administer assessment of youth behaviors and outcomes, as well as measures of the quality of youth experiences in summer programs.

Key findings from the assessment conducted in 2014 are as follows:

- The majority of participants in the Summer Matters summer programs reported strengths in the areas of work habits, science and math efficacy, and social competencies. At the same time, a substantial minority of the youth expressed low or fair interest in science or a career in science. These youth reports can be used by programs to inform their understanding of youths' perceived strengths, weaknesses, and interests.

- The youth reports of the quality of their experiences in the summer programs indicated that the Summer Matters programs were positively experienced by 70% of the attendees. A substantial majority of youth reported supportive relationships with staff and with peers at the Summer Matters programs. In addition, youth reported interest in program activities. Less than 6% of the youth reported poor quality experiences in the summer programs.

- Youth reports of the quality of their experiences in the summer programs were linked to youth outcomes at the conclusion of the program. Youth who reported more positive relationships with staff and peers and expressed greater interest in program activities also indicated less misconduct and better work habits, social competencies, and efficacy in academic domains.

- Attendance data were obtained from eight program sites. These attendance data indicated high levels of participation in the Summer Matters programs, averaging 139 hours for elementary students and 119 hours for middle school students. This is an excellent level of attendance.

- Program attendance was found to relate to youth reports of math and science efficacy and to greater youth interest in the program activities. These findings underscore the value of programs devoting time and resources to collecting attendance data.

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