Readiness for Kindergarten 2018

A Continuation Study Conducted by the Mayor's Commission for Children
Springfield, Missouri
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INTRODUCTION

The Readiness for Kindergarten study was first conducted by the Mayor's Commission for Children in 2006 with the participation of nine area school districts. In 2010, the first follow-up study was conducted with four of the original school districts from the initial study. Additional follow-up studies were conducted in 2014 and 2016 with three of the original area school districts: Springfield, Strafford and Fair Grove. An electronically administered survey was first employed in 2014 as were newer versions of the survey materials. The technical reports describing in detail the rationale, methodology and results may be viewed at the following website: https://www.springfieldmo.gov/794/Mayors-Commission-for-Children

The methodology employed in 2018 was largely consistently with that employed in 2014 and 2016. Teachers were administered survey's containing items assessing general perceptions of the children in their class. The survey also contained 38 Devereux Early Childhood Assessment (DECA) questions to assess the children's social and emotional development. Although the prior version of the DECA (used in 2006 and 2010) contained only 37 items, many items were identical or similar allowing for meaningful comparisons. Teachers also reported demographic data and experiential data including DIAL-4 percentiles which reflect motor, language and concept development and which allow for limited contrasts with the DIAL-3 percentiles supporting the earlier 2006 and 2010 reports. A copy of the survey may be found in Appendix A.

The primary goals of the 2014, 2016, and 2018 study were to provide time-lag comparisons with the findings of the 2006 and 2010 research. Therefore, we maintained the original methodology with few exceptions. In 2016, a considerable amount of data was excluded because 45 of the children for whom surveys were completed were already age six at the time the survey. Therefore, in 2018, we adjusted the method of obtaining a random sample of five kindergarten students from each classroom to ensure that the sample did not include children who were older than 5 years-of-age. Teachers were provided a randomly-ordered list of names of 5-year-old children in their classroom and were instructed to select the first five children on the list whose parents had provided consent to participate.

Surveys were requested from 104 kindergarten teachers in the Springfield R-12 school district between October 1st and October 22nd. A total of 94 teachers responded. Two teachers were unable to respond due to maternity leave and resignation. We also did not expect responses from nine teachers because there where less than five kindergarten students in their classrooms. However, one of these teachers completed a survey for one student. A total of 435 surveys were completed for a response rate of 93.5% (calculations were based on a possible 5 surveys from 93 teachers).

FINDINGS FROM THE CURRENT SURVEY, OCTOBER, 2018

In this section, 2018 kindergarten readiness and its relationships with free/reduced lunch status, attendance at preschool program and gender will be examined.

Overall, how do teachers evaluate the kindergarten readiness of their students?

|	Not prepared	Prepared	Well prepared	Not Sure
N = 435	113 (26.0%)	188 (43.2%)	131 (30.1%)	3 (0.7%)
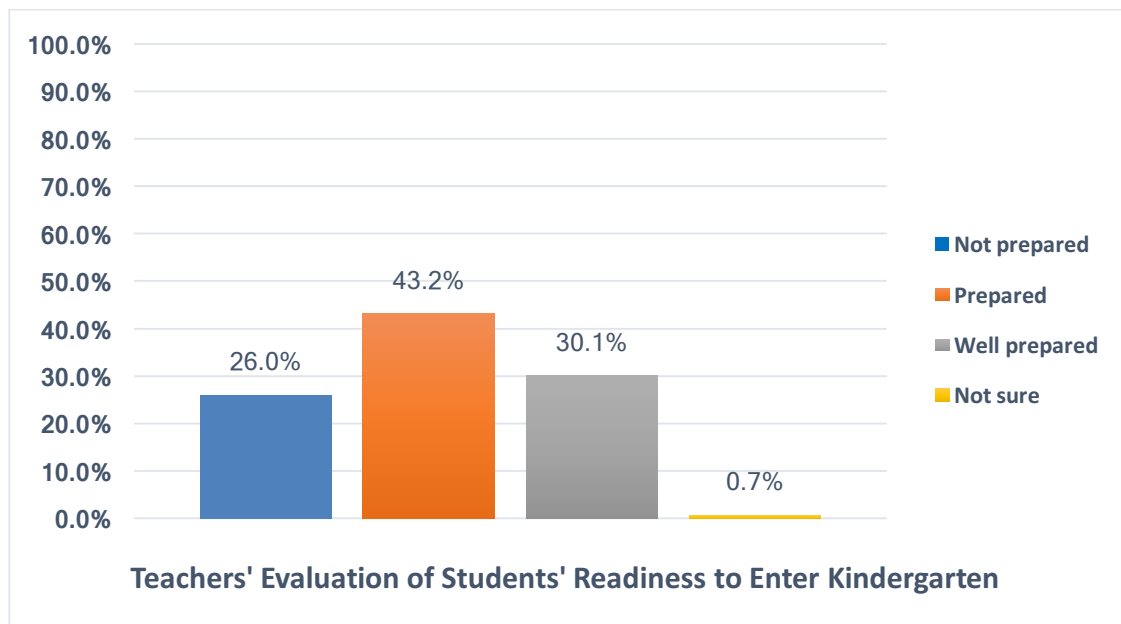
Data from the three students whose teachers answered "not sure" to the *readiness to enter kindergarten* question will not be included in analyses involving the *readiness to enter kindergarten* variable due to low cell count (i.e., less than 5).

Is there a statistically significant relationship between student SES and Kindergarten Readiness?

Yes. A higher proportion of students eligible for Free/Reduced lunch were described by their teachers as *not prepared* for kindergarten. And, a higher proportion of students paying regular lunch prices were described as *well prepared* for kindergarten.

	Not prepared	Prepared	Well prepared
FR Lunch, N = 224 (52%)	91 (40.6%)	98 (43.8%)	35 (15.6%)
Reg Lunch, N = 207 (48%)	22 (10.6%)	89 (43.0%)	96 (46.4%)

Readiness for Kindergarten by Lunch Status
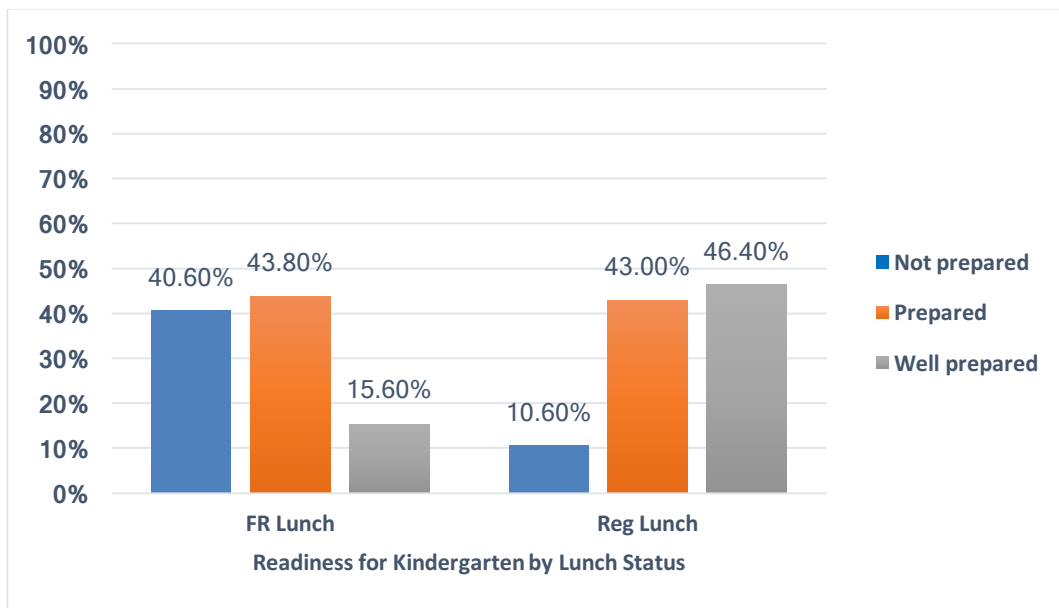
Is there a statistically significant relationship between attendance at a formal preschool program and Kindergarten readiness?

Yes. Student who did not attend a formal preschool program were disproportionately *not prepared* for kindergarten. A smaller percentage of these students were identified by their teachers as *well prepared* for kindergarten as well.

|	Not prepared	Prepared	Well prepared
Did Not Attend, N = 88 (29.7%)	45 (51.1%)	29 (33.0%)	14 (15.9%)
Attended, N = 208 (70.3%)	37 (17.8%)	102 (49.0%)	69 (33.2%)
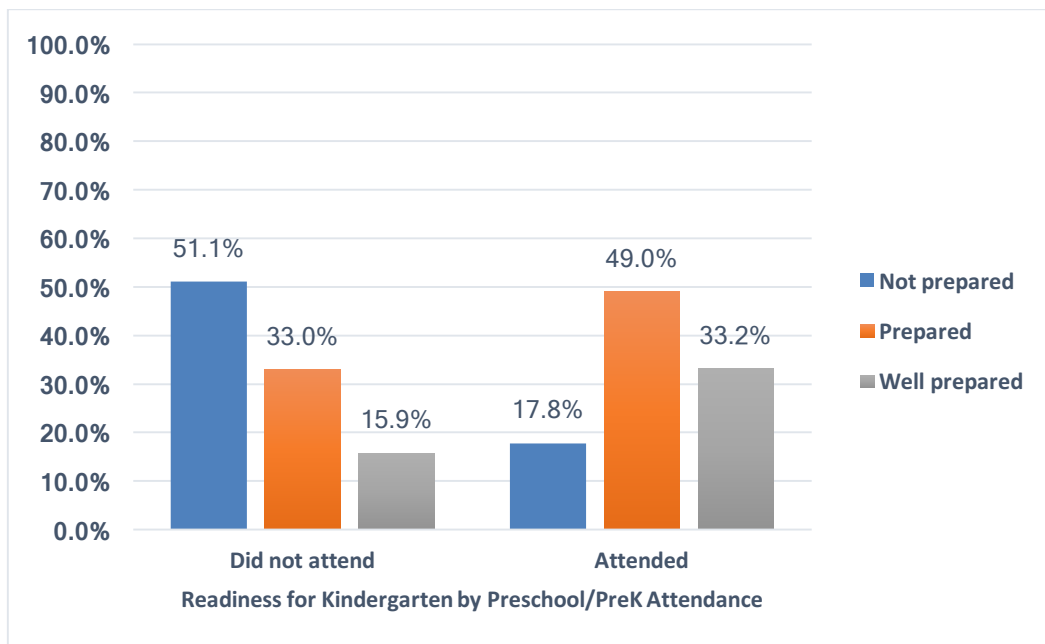
What is the combined effect of attendance at a formal Preschool/PreK program and SES on Kindergarten readiness?

An additional analysis was conducted to examine the combined effect of Preschool/PreK attendance and socioeconomic status on Kindergarten readiness. For ease of interpretation, the w*ell prepared* category was combine with the *prepared* category for a single comparison with the *not prepared* category.

- A significantly higher proportion of children who did not attend a formal preschool program and receive free or reduced lunch were identified by their teachers as *not prepared* for kindergarten and a significantly lower proportion were identified as *prepared/well prepared* for kindergarten by their teachers.
- The opposite was found for children who attended preschool and pay regular lunch prices. A significantly lower proportion were identified as *not prepared* and a significantly higher proportion were identified as *prepared/well prepared* for kindergarten by their teacher.
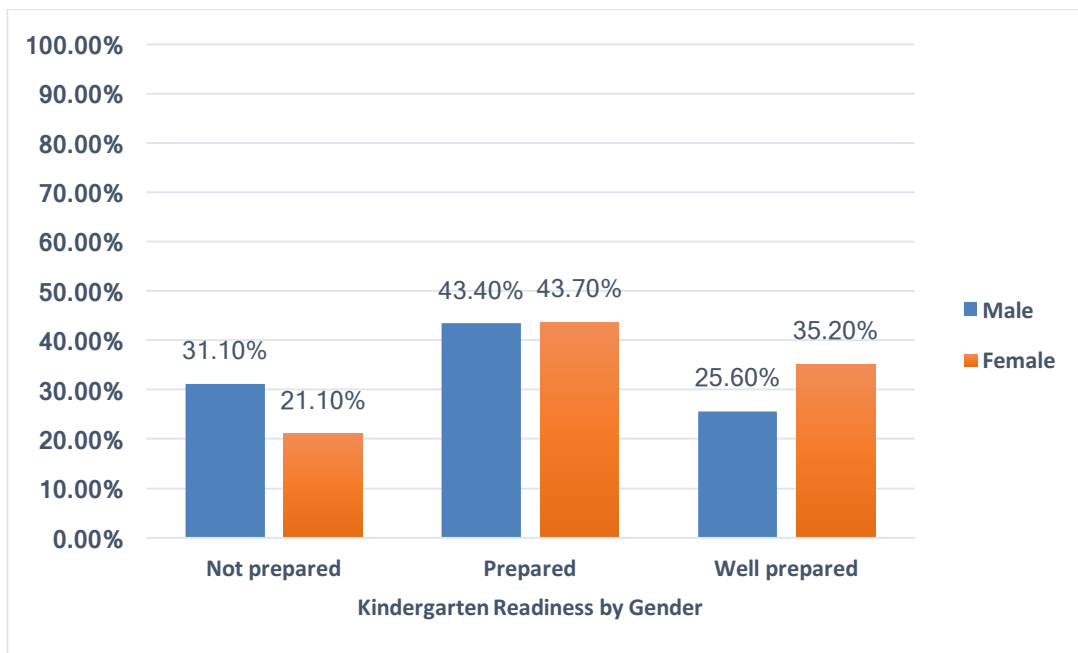
	Not prepared	Prepared/Well Prepared
Did Not Attend		
Free/Reduced, N = 63 (21.3%)	36 (57.1%)	27 (42.9%)
Regular, N = 25 (8.4%)	9 (36%)	16 (64%)
Attended		
Free/Reduced, N = 103 (34.8%)	32 (31.1%)	71 (68.9%)
Regular, N = 105 (35.5)	5 (4.8%)	100 (95.2%)
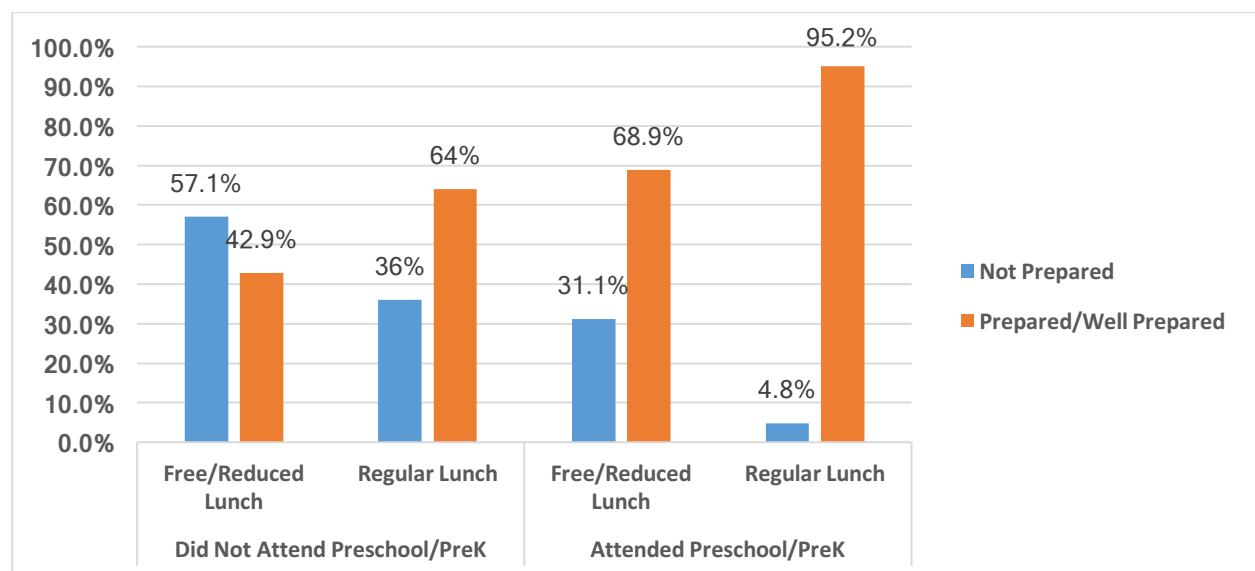
Is there a statistically significant relationship between gender and Kindergarten readiness?

Yes. A higher proportion of male students were identified by their teachers as not being prepared for kindergarten as compared to female students. Conversely, a higher proportion of female students than male students were identified by their teachers as being well prepared for kindergarten.
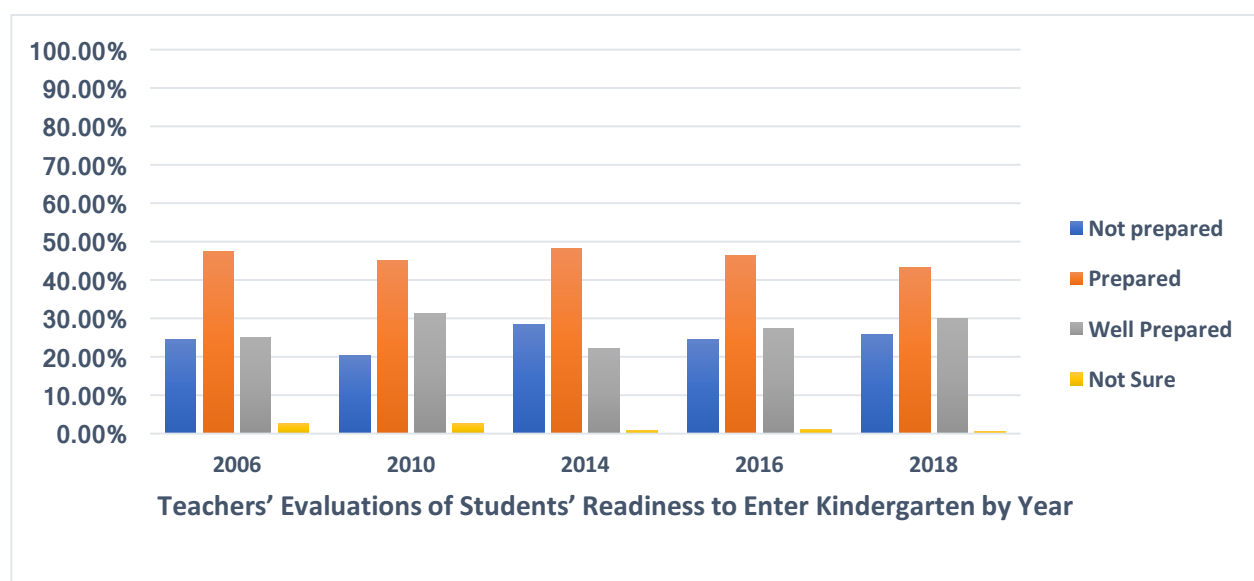
	Not prepared	Prepared	Well prepared
Male, N = 219 (50.7%)	68 (31.1%)	95 (43.4%)	56 (25.6%)
Female, N = 213 (49.3%)	45 (21.1%)	93 (43.7%)	75 (35.2%)

Comparisons of Data from 2006, 2010, 2014, 2016, and 2018

**Teachers' Evaluations of Students' Readiness to Enter Kindergarten**

	Not prepared	Prepared	Well Prepared	Not Sure	N
2018	113 (26.0%)	188 (43.2%)	131 (30.1%)	3 (0.7%)	435
2016	77 (24.7%)	145 (46.5%)	86 (27.6%)	4 (1.3%)	312
2014	81 (28.5%)	137 (48.2%)	63 (22.2%)	3 (1.1%)	284
2010	78 (20.4%)	173 (45.3%)	120 (31.4%)	11 (2.9%)	382
2006	78 (24.7%)	150 (47.5%)	79 (25.0%)	9(2.8%)	316

Teachers' Evaluations of Students' Readiness to Enter Kindergarten by Year

- The percentage of students identified as not prepared for kindergarten was significantly higher in 2014 than in 2010. Data from 2016 and 2018 suggest a slight decrease in the percentage of students identified as *not prepared* for kindergarten from 2014. However, the difference was not statistically significant. Nor was the difference in the percentage of students identified as not prepared in 2018 compared to either 2006 or 2010.

DIAL-3 (2006, 2010) and DIAL-4 (2014/2016) Percentile Scores
(Norm mean = 50)

	Mean	Standard Deviation	N
2018	62.61	31.39	371
2016	65.20	29.81	281
2014	61.92	31.88	252
2010	71.98	27.09	365
2006	68.24	26.54	302
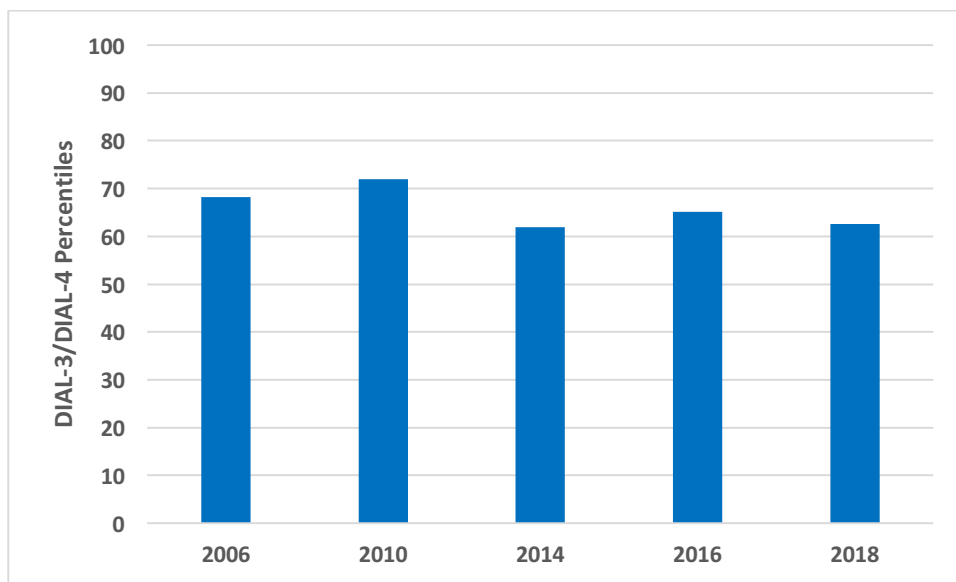
- Higher scores on the DIAL-3 and DIAL-4 indicate greater strengths in conceptual, language, and motor development.

- Statistically significant differences were found between the percentiles in 2018 and those in 2010. Similar to 2014 and 2016, DIAL percentiles in 2018 are significantly lower than those recorded in 2010. It is unknown if this is the result of different parameters of the newer vs. older versions of the DIAL, a true time-lag/cohort effect that may exist over these years or other specific reasons and combinations of reasons.

Items in common from the original (2006/2010) and revised (2014/2016) Devereux Early Childhood Assessment (DECA)

	Mean	Standard Deviation	N
2018			
Protective Factors items	75.83	16.2	435
Behavioral Concerns items	10.42	7.52	435
2016			
Protective Factors items	71.99	14.98	312
Behavioral Concerns items	9.27	7.00	312
2014			
Protective Factors items	69.47	13.70	284
Behavioral Concerns items	9.96	7.38	284
2010			
Protective Factors items	75.58	17.14	367
Behavioral Concerns items	8.69	6.04	369
2006			
Protective Factors items	71.79	15.20	282
Behavioral Concerns items	9.56	6.13	310

- Higher scores on the Protective Factors items measure positive developmental assets for the children that support social and emotional strengths. On the Protective Factors items common to the original DECA and the revised DECA, values in 2018 were similar to those found in 2010; both of which were significantly higher than values in all other years.

- Higher scores on the Behavioral Concerns items measure negative characteristics of children that restrict social and emotional wellbeing. Scores on the Behavioral Concerns items common to the original DECA and the revised DECA in 2018, were significantly higher than scores in 2010. However, no other years' scores are different.

- The differences on DECA scores are small, suggesting that while statistical significance was obtained, "practical significance" (i.e., the efficacy of this finding for policy changes) is absent.

Additional Analyses of Interest

Free/Reduced Lunch and Regular Lunch

	Free/Reduced Lunch	**Regular Lunch**	**Total**
2018	226 (52.1%)	208 (47.9%)	434
2016	142 (51.6%)	133 (48.4%)	275
2014	134 (53.2%)	118 (46.8%)	252
2010	203 (53.4%)	177 (46.6%)	380
2006	125 (40.8%)	181 (59.2%)	306
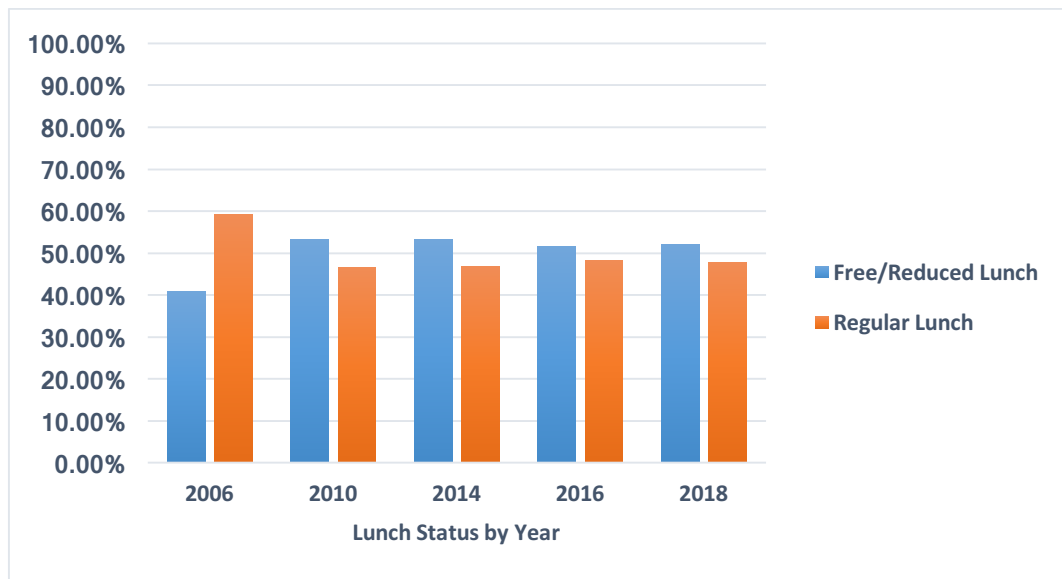
- The percentage of students qualifying for Free or Reduced Lunch was significantly lower in 2006 than in 2010, 2014, 2016, and 2018.

For further information, contact Brigitte Marrs at the Mayor's Commission for Children (417)864-1656.

SCHOOL READINESS SURVEY 2018

The survey below is divided into two parts. Part 1 asks background questions about you and your kindergarten students in general. Part 2 asks background questions about specific children in your classroom and contains the items from the Devereux Early Childhood Assessment. Before you begin, please read this section and then follow the instructions below to select five students. If you need to stop in the middle of the surveys, you can leave and return later through the link provided in the email.

If you run into any problems completing the surveys, please contact Melissa Fallone at 417-836-6528 or MFallone@missouristate.edu.

Part 1

Teacher's last name:

How many kindergarten students are in your classroom?

How many of your students this year were not ready to enter Kindergarten and meet its challenges successfully?

How many years have you been teaching?

How many years teaching Kindergarten?

Part 2
Student Selection Instructions: Please read these instructions before you begin selecting five students for the School Readiness Survey.

The following list contains the randomly ordered names of students eligible for the study based on their date of birth. Beginning with the first student on the list, check to see if you have received a signed consent form from the student's parent or legal guardian. If a signed consent form has not been returned, go to the next student on the list. Continue this process with the goal of identifying the first five students on the list with a signed consent form.

A randomly ordered list of eligible students appears here

Once you have identified five students, make a note of which students were selected or simply number the consent forms of the selected students from 1 to 5. This will be helpful, in the event that you complete surveys for one or more of the students at a later time.

The following questions were answered for each of the five eligible and randomly selected children.

Please use information provided in **eSchool** to answer the following questions about the **First** student selected.

Student SPS ID number:

Student Date of Birth (mm/dd/yy):

DIAL 4 percentile:

Student's gender:

○ Male
○ Female

What is this child's ethnicity?

○ Hispanic or Latino
○ Not Hispanic or Latino

What is this child's race? Mark one or more races to indicate what the child's parents or the child considers himself/herself to be.

○ White
○ Black or African American
○ Asian
○ American Indian or Alaska Native
○ Native Hawaiian or Other Pacific Islander

Student lives with: (MARK ALL THAT APPLY)

❑ Both parents
❑ Father
❑ Stepfather
❑ Mother
❑ Stepmother
❑ Guardian

Lunch status:

○ Free/Reduced
○ Regular Price

Answers to questions on this page are not available through eSchool. If you know the answers to these questions, please provide them below.

What preschool program(s) did this child attend? MARK ALL THAT APPLY

❑ Headstart
❑ Title I
❑ Faith based (enter name of program below) _____
❑ Private provider (enter name of program below) _____
❑ Other
❑ None

Highest level of education in household: years completed:

How ready was this child to enter Kindergarten?

○ Not Prepared
○ Prepared
○ Well Prepared
○ Not Sure

The following questions describe a number of behaviors seen in some young children. Read the statements that follow the phrase: During the past 4 weeks, how often did the child... and click on the circle underneath the word that tells how often you saw the behavior. Please answer each question carefully. There are no right or wrong answers. Please do not skip any items.   During the past 4 weeks, how often did the child...

	Never	Rarely	Occasionally	Frequently	Very Frequently
act in a way that made adults smile or show interest in him/her?	❍	❍	❍	❍	❍
listen to or respect others?	❍	❍	❍	❍	❍
control his/her anger?	❍	❍	❍	❍	❍
seem sad or unemotional at a happy occasion?	❍	❍	❍	❍	❍
show confidence in his/her abilities (for instance, say "I can do it!")?	❍	❍	❍	❍	❍
have a temper tantrum?	❍	❍	❍	❍	❍
keep trying when unsuccessful (show persistence)?	❍	❍	❍	❍	❍
seem uninterested in other children or adults?	❍	❍	❍	❍	❍

During the past 4 weeks, how often did the child...

	Never	Rarely	Occasionally	Frequently	Very Frequently
use obscene gestures or offensive language?	○	○	○	○	○
try different ways to solve a problem?	○	○	○	○	○
seem happy or excited to see his/her parent or guardian?	○	○	○	○	○
destroy or damage property?	○	○	○	○	○
try or ask to try new things or activities?	○	○	○	○	○
show affection for familiar adults?	○	○	○	○	○
start or organize play with other children?	○	○	○	○	○
show patience?	○	○	○	○	○

During the past 4 weeks, how often did the child...

	Never	Rarely	Occasionally	Frequently	Very Frequently
ask adults to play with or read to him/her?	○	○	○	○	○
have a short attention span (difficulty concentrating)?	○	○	○	○	○
share with other children?	○	○	○	○	○
handle frustration well?	○	○	○	○	○
fight with other children?	○	○	○	○	○
become upset or cry easily?	○	○	○	○	○
show an interest in learning new things?	○	○	○	○	○
trust familiar adults and believe what they say?	○	○	○	○	○

During the past 4 weeks, how often did the child...

	Never	Rarely	Occasionally	Frequently	Very Frequently
accept another choice when his/her first choice was not available?	○	○	○	○	○
seek help from children/adults when necessary?	○	○	○	○	○
hurt others with actions or words?	○	○	○	○	○
cooperate with others?	○	○	○	○	○
calm himself/herself down?	○	○	○	○	○
get easily distracted?	○	○	○	○	○
make decisions for himself/herself?	○	○	○	○	○
appear happy when playing with others?	○	○	○	○	○

During the past 4 weeks, how often did the child...

	Never	Rarely	Occasionally	Frequently	Very Frequently
choose to do a task that was hard for him/her?	○	○	○	○	○
look forward to activities at home or school (for instance, birthdays or trips)?	○	○	○	○	○
touch children or adults in a way that you thought was inappropriate?	○	○	○	○	○
show a preference for a certain adult, teacher, or parent?	○	○	○	○	○
play well with others?	○	○	○	○	○
remember important information?	○	○	○	○	○