Length of School Day in Kindergarten, 2007–2008

FINAL REPORT

January 2009

Susan B. Palmer, Ph.D. University of Kansas

Gayle M. Stuber, Ph.D. Kansas State Department of Education

This report was published by the University of Kansas, in collaboration with the Kansas Health Institute and the Kansas State Department of Education. The authors alone are responsible for the accuracy of the contents of this report.

Funding for this project was provided by the Kansas Health Foundation, Wichita, Kansas. The Kansas Health Foundation is a philanthropic organization whose mission is to improve the health of all Kansans.

LENGTH OF SCHOOL DAY IN KINDERGARTEN - 2007-08 – FULL REPORT

Susan B. Palmer, Ph.D., University Of Kansas
Gayle M. Stuber, Ph.D., Kansas State Department of Education

INTRODUCTION AND SUMMARY OF RESULTS

An initial Kansas Kindergarten Assessment Initiative (KAI) funded by the Kansas Health Foundation and Kansas Health Institute during the Fall of 2007 preceded this smaller follow-up study examining the effect of length of Kindergarten day on randomly selected children as they finished the 2007-08 Kindergarten year. Results from these half day and full day Kindergarten analyses show that full day sessions are more effective in promoting positive Kansas Early Learning Inventory (KELI) teacher ratings of Kindergarten students in Kansas. Although the KELI ratings improve in both full and half day classrooms across the year, an indication that children are learning, there is evidence to show that full day sessions provide some significantly better mean gains.

The current, comprehensive measures used in the fall 2007-08 KS-KAI Project and the parallel measurement completed by KSDE suggest that while many Kansas children are coming to Kindergarten prepared to be successful, there are still a significant number of children lacking the necessary skills for success. Children who speak other languages, children with identified disabilities, and children in families that qualify for free or reduced lunch at school due to income limitations are doing less well overall. However, results from the half day and full day Kindergarten analyses show that full day sessions are slightly more effective in promoting academic learning for children at-risk based upon Kansas Early Learning Inventory (KELI) results.

WHAT MAKES A DIFFERENCE FOR YOUNG CHILDREN?

A number of factors within families, communities, and schools make a contribution to Kindergarten readiness and continued progress in school for children in Kansas and elsewhere. Do families spend time supporting their child's learning? Is reading a regular routine for children and families each day as they grow and develop? Do children have a stable home, good medical care, and someone who listens and works with them to figure out the world around them? Are there adequate economic and social resources in the community to help families cope? Do communities have preschool opportunities and other aspects of community supports for young children and families? Are communities supporting parents to be the good providers and nurturers of young children? Are schools ready for children? Do schools meet the needs of children and their parents by providing adequate programming and support? For example, do schools provide needed services such as English language instruction for children speaking other languages in their home. School readiness is more than measurement. Readiness involves enhancing learning opportunities for all children and promoting higher quality options for better child development through family, community and school supports.

Readiness for Kindergarten involves not only the numerous skills and capacity of children which vary across and within the population of Kansas, but also how these indicators and components of readiness are interrelated. The question of being ready to learn at Kindergarten entry can be answered, in part, by looking at the group of children at Kindergarten entry and whether or not most of them continue to make progress by the end of the Kindergarten year and beyond.

Amount of Time Spent in Learning Activities

The random sampling procedure used in the fall of 2007 in the Kansas Kindergarten yielded a larger number of full day Kindergarten students (74.7 %) than half day students (25.3 %) for the total sample of 2,666 children. Across the state about 82% of children attended full day sessions during the same year. The sample in the current study included 83.9 % full day students, very close to the KSDE figure of 82% for the same school year. In contrast, during the 1970's less than 15% of children nationwide attended full-day programs with 55 % at the end of the 1990s in full-day Kindergarten. The number of full day programs for Kindergarten has been increasing over time.

One way schools can be ready for children who are entering Kindergarten is to provide a full day schedule for the Kindergarten year so teachers have the time to meet the needs of all the children through appropriate educational opportunities. As children enter school for the first time, there are expectations for growth in learning (positive change) over the Kindergarten year with a strong focus on learning and improvement in conceptual development. This is especially true in the current educational landscape given the current federal guidelines for school improvement and child achievement. One factor which may impact the growth children experience during Kindergarten is the amount of classroom instruction time as well as the appropriate instructional time that is allotted during the school day. A comparison of time spent during a typical school day for half and full day classrooms is in Figure 1. These two sample schedules derived from the 40 classrooms participating in observational measures show that there is more time for academic instruction and practice of concepts in a full day classroom.

Figure 1 – Schedules for Half and Full Day Classrooms

Half Day – 3 hour schedule (180 minutes)

8:45 Children arrive

9:00-9:10 Opening information, stories, sharing

9:10-9:30 Math Instruction – Whole Group

9:30-10:00 Music/Physical Education/Art, Library, Computer Lab (varying days)

10:00-10:20 Bathroom and return to class

10:20-10:30 Snack

10:30-10:45 Language Arts – Whole Group

10:45-11:35 Either Centers or Science, Social Studies, Small group learning

11:35 – 11:45 End of Day activities, dismissal

Full Day – 7 hour schedule (420 minutes)

8:20-8:30 Children arrive and share information

8:30-9:10 Calendar, listening, journals

9:10-9:35 Centers

9:25-9:50 Circle time

9:50-10:05 Recess

10:05-11:40 Literacy- large and small groups

11:40-12:00 Music, in classroom

12:00-12:40 Lunch and recess

12:40-12-55 Free reading / rest time

12:55-1:20 Physical education

1:20-1:45 Math

1:45-2:10 Library/computers/reading with older students

2:10-2:20 Recess

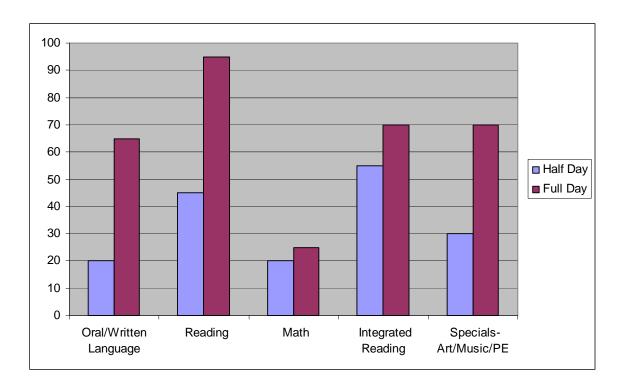
2:20-2:50 Small group learning Math and Literacy

2:50-3:20 Sharing time, story time, clean-up and dismissal

Table 1 Comparison of Half and Full Day Time on Instruction

	Oral/Written Language	Reading	Math	Integrated Learning	Specials-Art/ Music/Phys Ed
Half Day	20 min.	45 min.	20 min.	55 min.	30 min. (170)
Full Day	65 min.	95 min.	25 min.	70 min.	70 min. (325)

Time of Instruction Available in Full and Half Days by Subject Area in Minutes



Often district decisions about the length of day for children in Kindergarten are the same district-wide, but in some cases, the length of the Kindergarten day varies at the building level, or even within the same building. There can be different Kindergarten class lengths within one elementary building. While considering the factors that impact learning, it is important to note that not only length of classroom attendance is critical but other factors such as schedule, certification level of teachers, teacher support methods, and parent encouragement for children and satisfaction with the school must be included as part of the equation for children's progress.

Observational data will be presented later in this report showing that despite the difference in amount of time Kindergarten teachers have, teacher-child interaction did not differ greatly between half day and full day Kindergarten classrooms. Thus, teachers in both full and half day classrooms are doing a very good job structuring learning activities and providing support for students so they can achieve, even if time is limited.

SCHOOL READINESS MEASUREMENT IN KANSAS

The purpose of the ongoing KSDE School Readiness Project is to collect data on entering Kindergarteners, information about Kindergarten classroom practices, and information about parent and home supports. This information is intended to be used to improve school readiness and school success for Kansas children and to highlight the school, family, and community factors promoting readiness, as indicated by the Kansas School Readiness Framework. Developed with representation from Kansans in state agencies, organizations, early childhood entities, and school districts, this Framework includes goals, indicators, and data measures that guide school readiness through community, school, and family factors.

In 2005-06, the first year that the KELI (Kansas Early Learning Inventory) was used, a total of 232 teachers participated in the School Readiness data collection with 2, 367 students selected for the project. Teachers provided parents of selected students with a short survey and 1,808 parents responded. Data during 2005-06 were collected on teacher's beliefs, their classroom practices via the Kindergarten Teacher Practices (KTP), children's abilities as measured by the KELI and a parent survey. Looking at half and full day classes, teachers in full day classrooms used more of the identified best practices such as having learning centers in the classroom on a daily basis, providing more hands-on learning experiences for children, having enough time for effective transitions between activities, encouraging children to explore learning concepts and materials through play, and allowing students more time to complete a learning task.

KSDE Information – KELI 2007-08

During the first six weeks of Kindergarten classes in the fall of 2007-08, the Kansas Health Foundation instituted a measurement of child level data using a number of standardized and appropriate measures. At the same time, classroom teachers whose children participated in the KS-KAI measurement process were asked to complete the Kansas Early Learning Inventory (KELI) on 10 of their children who had consent for KS-KAI. The KELI is an observation measure of child achievement that is completed by classroom teachers on individual children. It was developed by Kansas early childhood experts in conjunction with Riverside Publishing Company that developed the Qualls *Early Learning Inventory (QELI*, Qualls, Hoover, Dunbar & Frisbie, 2003). Kansas added the domains of Physical Development, Symbolic Development, and Social Emotional Development. All other domains come from the *QELI*, a national normative sample assessed, including the following domains: Written Language, Math Concepts, General Knowledge, Oral Communication, Work Habits, and Attentive Behavior.

HALF DAY AND FULL DAY ANALYSIS

Description of Half Day, Full Day Sample

For this half and full day study, 1,299 students from the fall KSDE sample also have spring KELI measures completed. There are 47.9 % female and 52.1 % male students, and approximately 8.3 % of the students are enrolled in English as a Second Language services. Children with IEPs represent 12.5 % of the KELI population; racial distribution of this smaller sample include approximately 1.92 % Hispanic or Latino children, 5.9 % African American children, 80 % White, and a number of other nationalities complete the group (2.2 %). The mean ages of children in the fall of 2007

for half and full day groups were almost the same: 4.97 years for half day and 4.98 for full day sessions. Teachers completed the same KELI teacher observation measures in order to record progress made during the year.

The KELI was administered at the start of Kindergarten in 2007 (1,988 children) and again at the end of the school year (2008) with 1,299 children. Below are the descriptions of the group of students who have pre-and post-KELI measures divided into Full-Day and Half-Day Kindergarten groups, including gender, race, and lunch status, indicating if children qualified for free and reduced lunch, a proxy or alternate measure for family income. There are 209 children (16.1 %) in half-day classrooms in this analysis and 1090 children (83.9 %) that are in full day classrooms.

Table 2- Demographic Descriptions of all Students in Analysis, and Full and Half Day Classes (n=1299 for most categories)

Gender

622 female (47.9 % of total) 677 male (52.1 % of total)

Half day female 104 (49.8 % of half day) male 105 (50.2 % of half day) Full day female 518 (47.5 % of full day) male 572 (52.5 % of full day)

Race

1,030 White (80.0 % of total sample) African American 76 (5.9 % of total)

Hispanic 153 (11.9 % of total) Other 28 (2.2 % of total)

Half day White 163 (78.4 % of half day) African American 8 (3.8 % of half day)

Hispanic 35 (16.8 % of half day) Other 2 (1.0 % of half day)

Full day White 867 (80.4 % of full day) African American 68 (6.3 % of full day)

Hispanic 118 (10.9 % of full day) Other 26 (2.4 % of full day)

Lunch Support

```
No Support 666 (51.3 % of total) Support 633 (48.7 % of total)

Half day - No Support 157 (75.1 % of half day) Support 52 (24.9% of half day)

Full day - No Support 509 (46.7 % of full day) Support 581 (53.3% of full day)
```

English as a Second Language

```
ESOL 108 (8.3 % of total) non-ESOL 1191 (91.7 % of total)

Half day ESOL 30 (14.4 % of half day) non-ESOL 179 (85.6 % of half day)

Full day ESOL 78 (7.2 % of full day) non-ESOL 1,012 (92.8 % of full day)
```

Individualized Education Plan

```
IEP 162 (12.5 % of total) No IEP 1,137 (87.5 % of total)
Half day IEP 18 (8.6 % of half day) No IEP 191 (91.4 % of half day)
Full day IEP 144 (13.2 % of full day) No IEP 946 (86.8 % of full day)
```

Did Progress Occur During Kindergarten?

There were differences in the overall group mean gains of full and half day classes and also in sub-group scores of the 1,299 children between fall-pre-tests and spring post-tests among students who receive lunch support, students receiving English as a Second Language services, and students with special education needs, as expected. These sub-groups showed statistically different mean scores for elements of the KELI both in half and full ay classrooms between pre- and post-tests.

Which Setting Supported More Progress?

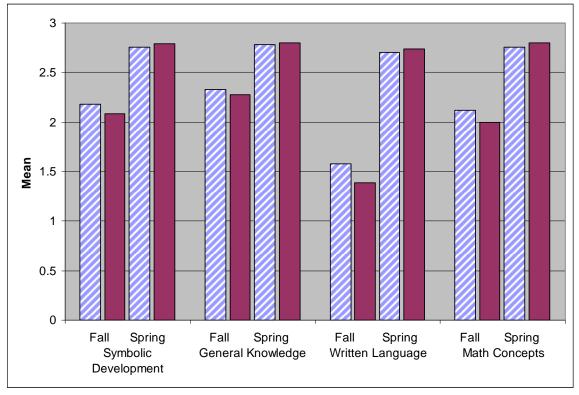
Children in full day classrooms made more progress than children in half day classrooms on the portions of the KELI outlined below. Following two semesters of Kindergarten instruction, teachers used the KELI again to rate the same students from the fall KELI measurement. In order to control for dependency among students who have the same teachers, students were nested within classrooms/teachers for this analysis. The variables analyzed from the KELI include measures of <u>Academic Skills</u>: (1) Symbolic Development contains items on phonemic awareness and literacy skills; (2) Math

Concepts include knowledge of numeracy and numbers and the basis of math for young children; (3) General Knowledge has information about determining same and different, and basic literacy concepts related to knowledge of print; (4) Written Language involves using cognitive and fine motor abilities to write individual letters, names, and simple words; and (5) Oral Communication, retelling stories, answering questions, and giving information. Learning Behavior sub-scores included Social Skills, Work Habits, and Attentive Behavior.

On most of the 5 academic measures, the mean gain for children in full day versus half day classrooms was significantly greater (Symbolic Development, p = .0049; Written Language, p < .0001; and Math Concepts, p = .0008, General Knowledge p < .1059) at the end of Kindergarten, but this was not true in the social and behavioral areas. Specifically were no significantly different results in the Social Skills, Work Habits, and Attentive Behavior areas of the KELI for this analysis. Mean scores for Fall and Spring for all variables on the KELI are contained in Appendix A.

Figure 3. Statistically Different Mean Academic Scores in Full and Half Day Classrooms Over the Course of the Kindergarten Year (Symbolic Development, General Knowledge, Written Language, and Math Concepts).

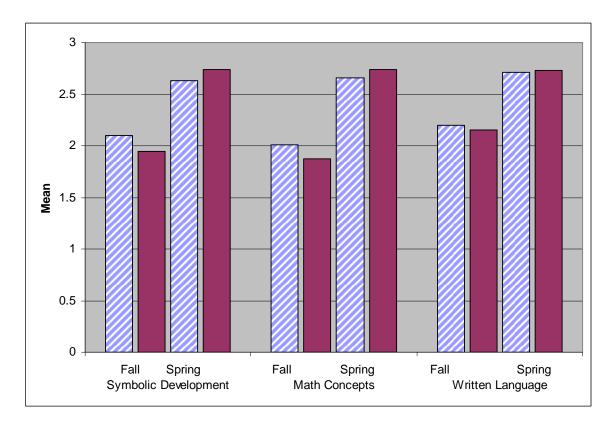
Note, the striped bars indicated half-day classes and solid darker bars indicate full day Kindergarten.



Differences were found between groups of children based on risk factors. Much like at Kindergarten entry, there are significant differences in how children do based on whether or not they live in low-income families, are English Language Learners, and if they have disabilities. The biggest differences were related to income status, based on the percentage of children receiving free and/or reduced lunch subsidy. It is important to note that there are more low-income children in full day programs (53%) than in half-day programs (25%). The good news is that the low income children in full day classrooms made significantly greater mean gains in Symbolic Development (p = .0115), math (p = .0218), and written language (p = .107) than their peers in half day programs. Mean KELI scores for Fall and Spring for low and higher income children are in Appendix B.

Figure 4. Mean Gains for Lower Income Children in Full and Half Day Classrooms

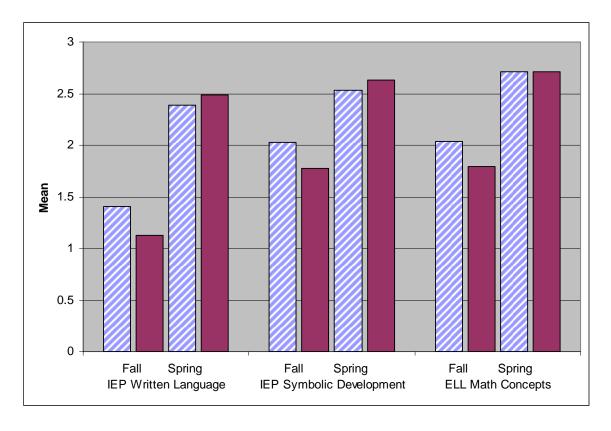
Note, the striped bars indicated half-day classes and solid darker bars indicate full day Kindergarten.



Children who speak a language other than English in the home and who have had limited exposure to English before arriving in school settings made significantly greater mean gains during full day classes in Math Concepts (p = 0.06), and children with disabilities (including physical, cognitive, and communication needs) had significantly different mean gains in full day vs. half day classes in Written Language (p=.0587) and Symbolic Development (p=.0394).

Figure 5. Significantly Different Mean Scores for English Language Learners (ELL) and Students with Disabilities Were Found for Written Language (IEP), Symbolic Development (IEP) and Math Concepts (ELL).

Note, the striped bars indicated half-day classes and solid darker bars indicate full day Kindergarten.



Results indicate that although half day classrooms started out high in the fall by the end of the year, the scores were about the same, indicating that full day classes may have a slight edge for improvement over the year. The overall population of the full day Kindergarten classrooms have a higher percentage of children (53.3%) who are receiving lunch supports (free/reduced price lunches) than the population in half day classrooms (24.9%). In other words, children in half day programs are proportionally from higher SES families with not as much to improve upon in terms of scores, and not as much time in the classroom to improve. The full day classrooms started out at lower levels to begin with, increased to about the same level of half day classes, but evidenced more change

overall, due to increased time of instruction or time to focus on concepts during other parts of the day.

Subgroups of Students

One important question we should be asking is "Are schools ready for the diversity of young children who walk through their doors?" (Sadowski, 2006). The population of Hispanic and other non-English speakers has risen dramatically in Kansas and across the country in recent years. Children who experience a different culture and speak a language other than English may be starting school at a disadvantage. Another limitation may be related to educators having lower expectations for children from other cultural environments or children with noted risk factors that often are perceived to negatively impact learning. Due to the rapid growth of the Hispanic population in the United States (14% of the population in 2005 as compared to 4% in 1960) and the lag in educational performance between this group and the general population, a national task force was organized in 2006 (Garcia & Miller, 2008). Having low socioeconomic status without good oral communication skills in English at school entry was linked to significantly lower scores on reading and math at the end of fifth grade. Recommendations included (1) increasing access to quality early childhood programs; 2) increasing the number of teachers who speak Spanish and English as well as the number second language acquisition specialists; and 3) increasing efforts to design, test, and

The Fall KELI Data by Sub-Groups - Lunch Subsidy, English as a Second Language (ESOL), Students with Special Education Needs (IEP), showed gaps in scores between each of these groups in both full and half day classes. This indicates that all

evaluate language and literacy instructional strategies across the early childhood years.

Kindergarten students do not come to school with the same level of preparation, knowledge, and skills. Looking at both the fall and spring score means for full and half day Kindergarten for both Academic and Behavioral portions of the KELI, results continue to show a noteworthy difference between groups. Information from sub-groups of students such as students receiving Free and Reduced Lunch Support, English as a Second Language Services, and special education services continue to show gaps in achievement for both Academic and Behavioral sections of the KELI at the end of the Kindergarten year. These gaps continue to be present in both full and half day classes for the subgroups needing additional help. Since the analyses look at group data, this indicates that although children with more learning needs do make progress, every child does not necessarily catch up to their peers during the Kindergarten year. A full day Kindergarten schedule appears to promote substantial learning for children, especially those who start at lower skill levels.

Observational Reports of Classroom Quality

A critical element in the education of young children, both in preschool and Kindergarten classrooms involves defining and understanding a child's exposure to learning opportunities, which can be described as a set of theoretically driven dimensions of interactions between adults and children linked to children's social, emotional, and academic development (Hamre & Pianta, 2007). Other terms used include "quality teaching" and "best" or "effective practice". How can we determine what content children are learning and how instruction is presented in the many classrooms in which they are attending Kindergarten?

ELLCO

Classrooms were randomly selected within the overall design of the KS-KAI study to include districts of all sizes for this portion of the full and half day study. See Appendix D for a more complete explanation of the selection process. Observers were trained to use the Early Language and Literacy Classroom Observation (ELLCO) to look at the level of literacy environment in randomly selected classrooms in central and eastern Kansas. Limitations on observing were that no observers were available in western Kansas, so that some of the schools in the sample west of Pratt were not directly observed. The ELLCO Classroom Observation and Teacher Interview provide information on quality of instruction and environment for literacy. It is important to note that Smith and Dickinson (2002) suggest that emergent literacy evolves through playful engagement in understanding of the conception of print and sounds and names of letters moving to more conventional literacy, involving direct instruction in actual reading and writing. Not only is it important for children to have good instructional support but also there is a need for a literacy-rich environment contributing to emergent literacy. Mean scores on the ELLCO Observation indicate that teachers are doing a very good job on providing literacy-rich environments for their students in both full and half day classrooms. It is difficult to draw conclusions on the basis of such a small number of half day classrooms (5), but in general, scores between 3.51 and 5 indicate high quality (shaded below). Basic support extends from 2.51 to 3.50 and low quality scores are less than 2.50. All scores are in the high quality or basic support range, indicating that the environment and classroom support for instruction and early literacy support is good for both full and half day classrooms.

Table 3. Sub-scale Scores of the ELLCO for Half and Full Day Classes

Sub-scales of the Early Language	Mean Scores &	Mean Scores &
& Literacy Classroom	S.D. for Half Day	S.D. for Full Day
Observation	(Range 1-5)	(Range 1-5)
(ELLCO)- for 5 half day and 32	**High Quality Scores are	**High Quality Scores are
full day classrooms.	shaded**	shaded**
Organization of the Classroom	4.40 (.894)	3.72 (.991)
Contents of the Classroom	3.80 (1.304)	3.16 (.987)
Presence and Use of Technology	3.40 (1.517)	3.25 (.984)
Opportunities for Choice and	3.00 (1.414)	3.03 (.822)
Initiative		
Classroom Management Strategies	4.80 (.447)	3.97 (.967)
Classroom Climate	4.80	3.75 (.842)
Observation Total Score	27.00	20.875 (3.31)

CLASS

The Classroom Assessment Scoring System (Pinata, Paro & Hamre, 2008) was used to observe forty randomly assigned classrooms to look at interactions between teachers and students that can be classified with the domains of Emotional Support, Classroom Organization, Instructional Support, and Student Outcomes. Classroom Quality is evaluated through observing classrooms through the lens of these three domains. Emotional Support is examined in terms of positive or negative climate, teacher sensitivity, and regard for student perspectives. Behavior management or how

well teachers monitor, prevent, and redirect behavior, productivity in terms of routines and directions to ensure maximum instructional time, and instructional learning formats are judged as part of Classroom Organization. The broad category of Instructional Support involves concept development, quality of feedback, and language modeling. Student Outcomes are rated as to student engagement in classroom activities. Scores range from Low to High, including 1 or 2 as Low, 3-5 being Medium, and 6-7 as being High. Average scores for classrooms observed are in the Medium range for Classroom Organization (5.71), Instructional Support (4.55), and Student Engagement (5.90) and rated High (6.08) in Emotional Support. Results of the areas of the class showed no statistically significant difference between full and half day classes so that the areas assessed on the CLASS did not account for differences between full and half day child ratings in the spring of 2008.

Table 4. Half and Full Day CLASS and Total Group scores, Means and Standard Deviations

Half (=5) and Full Day (=35) CLASS Scores	Full Day Means	S.D.	Half Day Means	S.D.	TOTAL GROUP Mean	SD
Emotional Support	6.05	.787	6.30	.34	6.0820	.748
Classroom Organization	5.66	.857	6.12	.34	5.7158	.823
Instructional Support	4.60	1.16	4.20	.92	4.5512	1.13
Student Engagement	5.83	.86	6.44	.51	5.9063	.845

Summary of Observation Results

Scores on both the ELLCO and the CLASS observation measures were not significantly different between the full and half day classrooms. This means that classrooms in this portion of the study (4 half day and 35 full day classes) were all of

high quality and had more than adequate environments and instruction regarding literacy.

An analysis by size of district yielded no significant differences indicating that the both large and smaller district representation in this sample was at a high level of performance.

This is good news, and a tribute to the Kindergarten classes in Kansas.

Interviews - Composite District Profiles

The issues in Kindergarten practices are relatively similar across many classrooms in the state. However, there are also district differences that show varying philosophies of education. Educators marvel at the enthusiasm of young children and their joyful pursuit of learning. Teachers struggle to educate children who may need additional support to be able to achieve. Some administrators understand the need for early childhood preparation and strive to get programs established for children in their districts, but many school supervisors are less understanding and therefore less supportive of early childhood and Kindergarten "best" practices.

Traveling about 200 miles from Topeka to a district, it is exciting to hear an administrator who clearly supports effective education for young children in Kansas. For more years than he can remember, this elementary principal has arranged and rearranged programming to get the best results for children in his district. Preschool classes are arranged either in schools or the community to support best practices in early childhood education for preparing children for school. Before full day Kindergarten was enacted in this district five years ago, a means of helping parents manage full day support for their children within the school was designed. This provided both nurturing care, a nutritious lunch, and time to interact with peers under the watchful eye of dedicated adults. As

district budgets were increased for Kindergarten support, full day Kindergarten evolved in this district and many teachers "love it and would never go back to half days". One teacher mentioned that "some children have problems at the beginning of the year, before they are used to being here all day", but this teacher admitted that after getting used to the schedule, most children adapted well. At the end of the conversation, the administrator mentioned that "Families in the district are changing.... We have more low income families moving in to neighborhoods that were quite stable in the past – now these groups move frequently and have more financial needs. The population is changing rapidly, and we need to meet the challenges that a more racially and economically different population represents." This is a theme heard throughout the state, as neighborhoods evolve and demographics change, due to economic and social changes within school districts.

It is clear that one district near a military base is meeting the needs of their population of young children in the best manner possible. Preschool classes are available when children are 3 and 4-years of age. Although transition to Kindergarten activities are at a minimum during the spring prior to Kindergarten due to the somewhat transient population on base, the personnel in this district warmly welcome children entering Kindergarten and their families in the fall of the year. Children often receive a letter from their teacher and a perhaps a teacher's photo welcoming them to class very soon. The parent obtains written information about schedules and meetings to be held to meet the school staff. If a meeting is held during the day, an evening meeting mirrors it to permit all parents to have the information. One parent mentioned that the school goes the extra mile to support children and their families who may have a family member on

deployment. A weekly session is held so that children with absent family members can attend to talk about their issues. This meeting also includes the school's service dog who provides added comfort to the setting. Parental satisfaction is high; the child whose parent was deployed had a great Kindergarten year and loved every minute.

In a large district in a highly populated area of Kansas, there are fewer resources currently available to provide full day sessions for Kindergarten, due to both lack of space in elementary schools and limited resources devoted to programming at the Kindergarten level. As a matter of fact, one teacher mentioned that although her classroom is only half-day, several classes down the hall have full-day programming to meet the needs of children at-risk for delay upon school entry. The children identified as needing more support can attend full day programming without payment, but if a parent with more resources wants their child to attend all day, the parent must pay a monthly fee to permit their child to attend more hours. The half-day classroom had a lot of turnover, as spaces became available during the year and children moved to a full day class in the same building. Thus, the Kindergarten programming is not the same for every child who attends one school, within a district. Another large district has all day Kindergarten in place at several schools that are typically attended by children who may be at risk for delays, and families that are more economically challenged. Although school leadership suggests results are excellent for the full day programming, at this point it is not feasible to provide full day classes for every child throughout the district due to financial constraints. In some larger districts, all day Kindergarten was less feasible due to the limited size of schools (not as many classrooms available to double the number of Kindergarten classes to accommodate all day programs) and budget constraints limiting

hiring twice the number of teachers at the Kindergarten level. For example, when half-day programs exist, one teacher may have 20 children in a morning session and another 20 children in the afternoon. To change to full day Kindergarten, twice as many teachers are needed as well as twice the number of classrooms.

A third large district is experiencing a significant growth in the population of school age children and the half-day classrooms are bursting with eager young faces. It is difficult to determine when and by what means this district will be able to provide full day instruction until more schools are built and resources for additional Kindergarten teachers are available. The Kindergarten teachers received Kindergarten-specific curriculum support in this district, but also are being asked to implement Kansas standards with classes lasting two hours and 50 minutes per day. "It's not enough time to be able to do the job that we know we can do", according to one teacher.

Parents of children attending half and full-day Kindergarten programs were interviewed to find out how their children did during Kindergarten and were specifically asked about the length of the instructional day. In most cases, parents were happy with the length of day where their children attended school. Parents who had children in larger districts with half-day Kindergarten mentioned that soon Kindergarten would or should be full-day. There was some concern that half-day instruction was not quite enough, but full days would be too much time for young children. But, one parent expressed dissatisfaction for full-day programming as the only option in her district. She felt that although full day class might be helpful to some families, she would have preferred to have her child attend less time during Kindergarten, since not much more was accomplished in the afternoon and this child should be home with her during the

afternoon hours. A parent of a child receiving full day services mentioned a flexible programming option in their school. Parents could opt for half-days in the same classroom but this parent said that their child would not have wanted to leave when most of the other children were still at school. Many parents described great strides in learning for their children during Kindergarten, including learning to read, understanding math better, and getting along well with others. One parent was greatly concerned about the extreme behavior needs of several children in her child's classroom and mentioned if these had been handled better by the administration, her child would have had a better experience.

DISCUSSION OF ELEMENTS OF READINESS

The Changing Curriculum in Kindergarten

There is often confusion about Kindergarten, since according to Graue (2006), "most adults remember Kindergarten as a time of play and transition from home to school" (p. 3). Today's Kindergarten is likely to be more structured and follows one or two years of group settings for many children who are new kindergartners. Today's Kindergarten is different in light of standards-based instruction and the push for children to be reading and understanding mathematics at earlier ages than before.

Through randomly selected teacher interviews of 30 teachers across the state, it was found that all but two teachers indicate that they are using and see merit in the curricula they use for reading, math, and a host of other subjects in Kindergarten. The teachers who use theme-based instruction (a weekly theme selected as a subject for programming for reading, math, and other activities) mention that they wish they had an established curriculum. Curriculum is important for the scope and sequence of

introduction of new ideas, and the coordination that it usually contains related to review of already introduced topics and ongoing instructional information.

Variations in Attendance and Age of Entry

There is a large variability in any classroom, depending on the age of entry, the typical developmental pattern and variations within the group, and the practice of redshirting or retention of children who are spending another year in Kindergarten. Graue (2006) details reasons why children are not matching the expected norm that teachers have, including slow maturation, lack of experiences previous to Kindergarten, and disability or learning problems. It is not easy to determine which of these reasons may be cause for many children who are having difficulty in Kindergarten. Even if we could find such reasons for child delays, Kansas children can attend Kindergarten if they reach the age of 5 years by August 31st. Screening for readiness is not an accepted practice given the NAEYC position on Kindergarten, but some schools do pre-screening to assist in classroom placement within classrooms and to give teachers information about children's beginning levels in most subjects. With the increased use of early starting dates across the state—some as early as the first week of August-- children may enter Kindergarten when they are four (turning five by August 31st, but still four on the first day of school). This increases the chronological age range of an average Kindergarten to close to three years since many children are 'held out' by parents until they are almost seven. This age range contributes to the need for teachers who understand development and are able to incorporate developmentally appropriate 'best' teaching practices to meet the needs of all of their children.

What's Happening in Early Childhood to Support Kindergarten Readiness?

Recent legislative efforts in Kansas have provided a number of initiatives that support school readiness of young children and impact their preparation for formal school instruction. The funding of the Early Childhood Block Grants (\$ 11 million) and the continued funding of the Pre-K Pilot (\$ 5 million) show legislative support for improving the school readiness of young children. Other established programs such as the Four Year Old At-Risk program, Head Start, Parents As Teachers, Early Head Start, early intervention and early childhood special education are funded at the federal and state level as a strategy to enhance the growth, development, and learning of young children. The Kansas Early Childhood Comprehensive Systems Plan (KECCS) has been in place for several years and has as its purpose promoting the readiness of Kansas to support young children and their learning. The number of 3- and 4-year-olds attending out-ofhome programs has doubled in the last 25 years (Barnett, 2005). Head Start released program information for the 2006 year in Kansas, showing a total of 46 grantees (17 Early Head Start, 0-2 years; 29 programs, 3-5 years). There are a total of 8,783 possible slots for children, primarily funded by federal funding. Within Kansas a number of state sponsored pre-K classrooms and four-year-old at risk placements are available for those who qualify, usually by need (identified delay on one area of functioning, speak language other than English, or a particular family composition – single or teenage parent). Preschool preparation for later school success is an element on the road to readiness that continues to be critically important.

What's Important for Kindergarten Success?

As stated previously, results from the half day and full day Kindergarten analyses show that full day sessions are slightly more effective in promoting academic learning for

children at-risk based upon Kansas Early Learning Inventory (KELI) results. However, the question about adequate progress in Kindergarten must not only involve the length of the Kindergarten day, but also what happens within any Kindergarten setting during the time allotted. Full day programming permits increased opportunities for children to practice skills and allows teachers time for special attention to meet the individual needs of children in the classroom through more informal interactions and more opportunities for play, a vehicle for learning in young children. In addition, the following elements are important in the evaluation of the need for improvement in managing Kindergarten activities.

Quality Matters - We must keep effective, seasoned, and experienced teachers in Kindergarten classrooms. ELLCO results show that the selection of classrooms observed have a high level of providing a literacy-rich environment and provide more than adequate instruction related to literacy activities. The CLASS measure shows a higher level of teacher provision of emotional support, classroom organization, and support of student engagement. Teacher skill level related to instructional support needs some improvement, so it is critical to provide additional resources for teachers and schools to maintain and improve the level of instructional support in many cases.

Attendance is Important – Kindergarten has changed over the last few years so that lots of academic instruction is introduced and woven into the ongoing curriculum during Kindergarten. Teachers report that the children who may need instructional support the most are often absent, due to lack of a state-wide attendance requirement for Kindergarten attendance. Although a bill was put forth during the 2007-08 Kansas

legislative session to require attendance in the Kindergarten year, no action was taken to assure that school attendance be mandatory earlier than age 7 years.

Curriculum and Teaching Methods Matter — The amount of curriculum required during the Kindergarten year appears to be increasing, with district expectations regarding child learning and Kansas state standards driving the education of children (See http://www.ksde.org/Default.aspx?tabid=1678). A large number of Kindergarten standards, benchmarks, and resulting indicators are listed for academic subjects including writing, reading, science, mathematics, geography, and governments/civics/economics. Addressing the diversity of learning needs within each classroom is also an important part of teaching. According to a committee at the Frank Porter Graham Child Development Institute, it is important to examine how schools support diverse learners related to specific learning needs of English language learners and children with special learning needs, and determine if culturally responsive practices take into account children's ethnic and racial backgrounds. However, even though curriculum is important, teachers must balance this with the need to not only teach children, but to nurture them through providing social, emotional, cognitive, and learning supports.

Effective supervision and promotion of Kindergarten – Based upon opinions gathered at the Kansas Kindergarten Teacher meeting held in June 2008, some teachers report they are not getting the administrative support needed to do an appropriate and effective job of teaching the young children in their classroom. Teachers indicated that they are more than willing to participate in the KSDE data collection process so that their supervisors can be informed that developmentally appropriate instruction is effective at the Kindergarten level and a difference is being made in the young lives of those attending

their classes. Administrators need training in child development and the learning needs of young children. Promoting developmentally appropriate practices in Kindergarten and primary grade classrooms may be one way to enhance learning, support development, and result in better academic learning and appropriate social behaviors – all aspects that are likely to show educational progress in later years.

Community Involvement including Preschool Educational Opportunities – Quality preschool or Pre-Kindergarten is clearly helping to support effective Kindergarten experiences for children in Kansas. More scrutiny is needed related to early childhood teacher certification and college preparation will support a well-trained and more effective teaching workforce. Child care licensing requirements for child care and preschool environments provide at the minimum, a healthy and safe environment. Effective and supportive supervision of the preschool classroom teachers will further enhance the mentoring and support needed for strong and effective teaching. Community partners who support ongoing training opportunities and communication between preschool and Kindergarten teachers will enhance the school success of their young children.

In closing, it is important to consider the guidelines for what Kindergarten "should be and do" offered by Kagan and Kauerz (2006). Kindergarten must remain special. Although everyone has hopes and dreams for Kindergarten from the perspective of children, parents, teachers, principals and policy makers, we need to keep each child in mind as decisions are made regarding this special year in school entry. Beyond all the content and educational supports, children's differences in learning and social emotional needs must be accommodated, as well as the needs of their family, related to length or

schedule of the Kindergarten day. Kindergarten must foster relationships with children and families, so that children develop a strong foundation for school and find support with their teachers and other adults to start the long educational process. Kindergarten is the gateway to formal schooling for most, if not all young children. Kindergarten teachers know that – and work to support and enhance their students' learning and success.

Recommendations

Conclusions from the KS-KAI and the Length of Day in Kindergarten studies can be used together with the Kansas School Readiness Framework and the Kansas Early Childhood Comprehensive System (KECCS) plan to inform programs and policies that enhance early care and education so all Kansas children are prepared for success as they enter and continue in school. Specific suggestions for the future include:

- 1) Continue to invest in the best possible early learning environments so Kansas children have the necessary skills they need at Kindergarten entry.
- 2) Keep Investing in full day Kindergarten programs, which result in greater gains than part day programs, particularly for children who are at-risk for school failure.
- 3) Ensure that full day Kindergarten classrooms are not just longer hours but continue to provide more high quality learning experiences, by promoting best practices, appropriate early learning instruction, and by employing teachers and administrators who have knowledge and training in early childhood education.
- 4) Assess the 2007-08 cohort of Kindergarten children's progress in Third Grade to determine if gains are sustained. The first KS KAI study provides a baseline of standardized measures that should be connected to achievement levels in Grade 3 Kansas

State Assessments to determine if initial achievement levels adequately predict future school success over time.

References:

- Barnett (2005). W.S. Barnett, J.T. Hustedt, K.B. Robin, and K.L.Schulman. *The State of Preschool: 2005 State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research, 2005.
- Garcia, E.E. & Miller, L.S. (2008). Findings and recommendations of the national task force on early childhood education for Hispanics. *Child Development Perspectives*, 2, 53-58.
- Graue, M. E. (2006). This thing called kindergarten. In D.F. Gullo (Ed.) Teaching and Learning in the Kindergarten Year. Washington, DC: NAEYC.
- Hamre, B.K. & Pianta, R.C. (2007). Learning opportunities in preschool and early elementary classrooms. In R.C. Pianta, M. Cox, & K.L. Snow (Eds.) School Readiness & the transition to kindergarten in the era of accountability (pp. 49-83). Baltimore, MD: Brookes.
- Hoover, Dunbar & Frisbie, (2003). *QELI,Qualls Early Learning Inventory*. Itasca, NY: Riverside Publishing.
- Kagan, S.L. & Kauerz, K (2006). Making the most of kindergarten- Trends and policy issues. In D.F. Gullo (Ed.) Teaching and Learning in the Kindergarten Year. Washington, DC: NAEYC.
- Pinata, R.C., Paro & Hamre, B.K.(2008). *Classroom Assessment Scoring System*. Baltimore, MD: Brookes.
- Sadowski, M. (2006). The *school readiness gap*. Harvard Education Newsletter, 22, pp1-4. Boston, MA: Harvard Graduate School of Education.
- Smith and Dickinson (2002). *Early language & literacy classroom observation*. Baltimore, MD: Brookes.
- Woodcock, R. W., McGrew, K. S., & Mather, N. (2001). Woodcock-Johnson III-Tests of Achievement. Itasca, NY: Riverside Publishing.

List of Appendices

Appendix A

KELI scores for Total Group Half and Full Day Mean Scores

Appendix B

KELI Mean scores for Lunch Support and No Lunch Support and other

Subgroups of the Sample during Half and Full Day

Appendix C

Vision for Kindergarten Readiness - Kansas State Department

Appendix D

District Size and Number of Half and Full Day Students in the Fall Sample.

Appendix A

KELI scores for Total Group Half and Full Day Mean Scores

Table 5. KELI mean scores for Fall 2007 and Spring 2008 for Social Emotional and Symbolic Development, General Knowledge, and Oral Communication * = significantly different mean gain scores over time between full and half day classes

Fall Scores	Social	Symbolic	General	Oral		
	Emotional Development	Development*	Knowledge*	Communication		
Half-Day- Mean	2.5504	2.1744	2.3522	2.5138		
n = 229						
Standard Dev.	.45566	.51788	.45724	.51675		
Full-Day- Mean	2.4312	2.0808	2.2695	2.4346		
n = 1070						
Standard Dev.	.58073	.60968	.54031	.61365		
Total – Mean	2.4522	2.0973	2.2841	2.4486		
n = 1299						
Standard Dev.	.56239	.59539	.52737	.59826		
Spring Scores						
Half-Day- Mean	2.7986	2.7686	2.7943	2.8532		
n = 229						
Standard Dev.	.28801	.34171	.28688	.28641		
Full-Day- Mean	2.7128	2.7892	2.7937	2.8085		
n = 1070						
Standard Dev.	.42293	.34687	.30959	.37235		
Total – Mean	2.7279	2.7856	2.7938	2.8164		
N = 1299						
Standard Dev.	.40367	.34593	.30561	.35897		

Table 6. KELI mean scores for Fall 2007 and Spring 2008 for Written Language, Math Concepts, Work Habits, and Attentive Behavior

^{* =} significantly different mean gain scores over time between full and half day classes

Fall Scores	Written	Math	Work Habits	Attentive		
	Language*	Concepts*		Behavior		
Half-Day- Mean	1.5401	2.1180	2.5621	2.5178		
N = 229						
Standard Dev.						
	.62293	.51127	.45096	.48090		
Full-Day- Mean	1.3894	1.9960	2.4864	2.4033		
n = 1070						
Standard Dev.	CO 40 4	60706	5.6650	c1005		
	.68424	.60786	.56652	.61825		
Total – Mean	1.4161	2.0176	2.4999	2.4236		
n = 1299						
Standard Dev.	.67602	.59356	.54837	.59762		
	.07002	.39330	.34637	.39702		
Spring Scores						
Half-Day- Mean	2.7015	2.7736	2.7860	2.7243		
n = 229						
Standard Dev.						
	.45770	.27469	.33733	.40637		
Full-Day- Mean	2.7362	2.7941	2.7187	2.6313		
n = 1070						
Standard Dev.	45204	20052	41047	52026		
	.45384	.30852	.41947	.52036		
Total – Mean	2.7301	2.7905	2.7306	2.6477		
N = 1299						
Standard Dev.	45454	20201	40.500	50224		
	.45454	.30281	.40688	.50324		

Appendix B

KELI Mean scores for Lunch Support and No Lunch Support and other Subgroups of the Sample during Half and Full Day

Table 7. Lunch Support (lower SES) KELI mean scores for Fall 2007 and Spring 2008 for Social Emotional and Symbolic Development, General Knowledge, and Oral Communication.

^{* =} significantly different mean gain scores over time between full and half day classes

Fall Scores –	Social Emotional	Symbolic Development*	General Knowledge	Oral Communication	
Lunch Support	Development	Development ·	Knowieuge	Communication	
(lower SES)					
Full Day- Mean	2.3553	1.9539	2.1521	2.3410	
n = 571	.61572	.61792	.56760	.65332	
Standard Dev.					
Half-Day- Mean	2.4165	2.0366	2.2133	2.338	
n = 62	.46127	.53305	.43832	.58648	
Standard Dev.					
Spring Scores					
Full Day -Mean	2.6623	2.7380	2.7251	2.7458	
Lunch Support	.45761	.38635	.34147	.41882	
(lower SES)					
n = 571					
Half Day- Mean	2.7117	2.6398	2.7295	2.7339	
n = 62	.33995	.35986	.24038	.38841	
Standard Dev.					

Table 8. Lunch Support (lower SES) KELI mean scores for Fall 2007 and Spring 2008 for Written Language, Math Concepts, Work Habits, and Attentive Behavior * = significantly different mean gain scores over time between full and half day classes

Fall Scores	Written Language*	Math Concepts*	Work Habits	Attentive Behavior
Lunch Support	Zanguage	Concepts		Benavior
Full Day- Mean	1.2471	1.8744	2.4221	2.3220
n = 571	.65838	.62625	.60463	.65854
Standard Dev.				
Half Day- Mean	1.4140	1.9895	2.4516	2.3548
n = 62	.59306	.47348	.46142	.52806
Standard Dev.				
Spring Scores				
Full Day- Mean	2.6608	2.7405	2.6530	2.5484
n = 229	.51271	.35366	.45734	.56193
Standard Dev.				
Half Day- Mean	2.6947	2.6976	2.6843	2.6037
n = 229	.40985	.31368	.37498	.43548
Standard Dev.				

Table 9. No Lunch Support (higher SES) KELI mean scores for Fall 2007 and Spring 2008 for Social Emotional and Symbolic Development, General Knowledge, and Oral Communication

Fall Scores –	Social	Symbolic	General	Oral	
No Lunch	Emotional	Development	Knowledge	Communication	
Support	Development				
(higher SES)					
Full Day- Mean	2.5181	2.2260	2.4046	2.5417	
n = 499	.52520	.56681	.47279	.54610	
Standard Dev.					
Half-Day- Mean	2.6001	2.2255	2.4037	2.5806	
n = 167	.44475	.50421	.45462	.47306	
Standard Dev.					
Spring Scores					
Full Day -Mean	2.7705	2.8477	2.8719	2.8801	
Lunch Support	.37149	.28472	.24669	.29542	
n=499					
(higher SES)					
Half Day- Mean	2.8308	2.8164	2.8180	2.8975	
n = 167	.26000	.32295	.29926	.22348	
Standard Dev.					

Table 10. No Lunch Support (higher SES) KELI mean scores for Fall 2007 and Spring 2008 for Written Language, Math Concepts, Work Habits, and Attentive Behavior

Fall Scores No Lunch Support (higher SES)	Written Language	Math Concepts	Work Habits	Attentive Behavior
Full Day- Mean	1.5533	2.1337	2.5600	2.4960
n = 499	.67738	.55567	.51026	.55520
Standard Dev.				
Half Day- Mean	1.5870	2.1649	2.6031	2.5783
n = 167	.62895	.51782	.44140	.44897
Standard Dev.				
Spring Scores – I	No Lunch Support	(higher SES)		
Full Day- Mean	2.8224	2.8556	2.7940	2.7263
n = 499	.35693	.23237	.35718	.45032
Standard Dev.				
Half Day- Mean	2.7040	2.8019	2.8238	2.7690
n = 167	.47538	.25400	.31516	.38688
Standard Dev.				

Table 11. Means for English Language Learners by Half-Day/Full Day Fall and Spring * = significantly different mean gain scores over time between full and half day classes

- 5151	innicant	iy uiii	CICIII IIICa	in gain sc	ores over	time betv	veen run	and nan d	iay Ciasi	303
Kindergarten Session Type and Time of Measurement		Social Emotional	Symbolic Dev.	General Know- ledge	Oral Commun- ication	Written Language	Math Concepts*	Work Habits	Atten- tive Behav- ior	
Half day	Fall	Mean	2.4774	2.1278	2.2567	2.1208	1.4675	2.0337	2.5905	2.5238
	N = 30	Std. Dev.	.38517	.48479	.41910	.68188	.55612	.46749	.33499	.53232
	Spring	Mean	2.7583	2.6722	2.7483	2.7208	2.8095	2.7083	2.7333	2.6857
	N = 30	Std. Dev.	.27452	.32307	.21814	.33426	.25190	.28317	.30184	.39240
	Total	Mean	2.6179	2.4000	2.4983	2.4208	2.1385	2.3767	2.6619	2.6048
	N = 60	Std. Dev.	.36059	.49212	.41502	.61236	.80070	.51118	.32424	.47078
Full day	Fall	Mean	2.4604	2.0043	2.0901	2.1296	1.3588	1.7904	2.5844	2.5674
	N = 78	Std. Dev.	.50676	.63506	.59927	.66473	.65560	.69093	.49225	.50965
	Spring	Mean	2.7981	2.6026	2.6701	2.6683	2.6685	2.7135	2.7692	2.7344
	N= 78	Std. Dev.	.30963	.42405	.35765	.44312	.39140	.32007	.32983	.40910
	Total	Mean	2.6292	2.3034	2.3782	2.3989	2.0137	2.2549	2.6774	2.6515
	N = 156	Std. Dev.	.45154	.61623	.57215	.62455	.84923	.70795	.42728	.46785
Total	Fall	Mean	2.4651	2.0386	2.1363	2.1271	1.3890	1.8570	2.5861	2.5552
	N= 108	Std. Dev.	.47442	.59751	.55827	.66634	.62890	.64474	.45215	.51395
	Spring	Mean	2.7870	2.6219	2.6915	2.6829	2.7077	2.7120	2.7593	2.7209
	N = 108	Std. Dev.	.29956	.39834	.32634	.41490	.36258	.30897	.32131	.40330
	Total	Mean	2.6261	2.3302	2.4113	2.4050	2.0483	2.2885	2.6731	2.6384
	N= 216	Std. Dev.	.42744	.58490	.53523	.61985	.83607	.66068	.40052	.46804

Table 12. Means of Children Without IEPs in Half Day and Full Day Classes - Fall and Spring

14515 121 11154115 51					,	un Day On				
Kindergarten Class					General			Math		
Session a	nd		Social	Symbolic	Know-	Commun-	Written	Con-	Work	Attentive
Time of N	/leasureme	ent	Emotional	Dev.	ledge	ication	Language	cepts	Habits	Behavior
Half day	Fall	Mean	2.6039	2.1974	2.3597	2.5249	1.5908	2.1336	2.6088	2.5595
	N = 191	Std. Dev.	.40612	.49660	.44014	.52367	.59741	.49055	.40365	.45207
	Spring	Mean	2.8344	2.7792	2.8026	2.8757	2.7292	2.7765	2.8055	2.7457
	N = 191	Std. Dev.	.24466	.32845	.26616	.24485	.42831	.25798	.31024	.37693
	Total	Mean	2.7191	2.4883	2.5806	2.7003	2.1600	2.4568	2.7072	2.6526
	N = 382	Std. Dev.	.35415	.51150	.42576	.44440	.77095	.50628	.37276	.42598
Full day	Fall	Mean	2.4835	2.1276	2.3136	2.4919	1.4245	2.0315	2.5360	2.4634
	N=946	Std. Dev.	.54041	.59212	.51887	.57429	.68634	.59202	.52870	.57589
	Spring N = 946	Mean	2.7482	2.8154	2.8181	2.8358	2.7740	2.8242	2.7534	2.6756
		Std. Dev.	.39873	.30942	.27284	.33600	.39005	.26099	.39453	.48749
	Total	Mean	2.6159	2.4719	2.5660	2.6637	2.1000	2.4289	2.6452	2.5699
	N = 1892	Std. Dev.	.49287	.58414	.48514	.50088	.87566	.60496	.47857	.54368
Total	Fall	Mean	2.5037	2.1394	2.3214	2.4974	1.4525	2.0486	2.5484	2.4797
	N = 1137	Std. Dev.	.52207	.57754	.50658	.56600	.67480	.57733	.51026	.55787
	Spring	Mean	2.7627	2.8093	2.8155	2.8425	2.7664	2.8161	2.7622	2.6874
	N = 1137	Std. Dev.	.37855	.31284	.27168	.32270	.39691	.26098	.38204	.47131
	Total	Mean	2.6332	2.4746	2.5684	2.6699	2.1101	2.4336	2.6557	2.5838
	N = 2274	Std. Dev.	.47393	.57250	.47563	.49192	.85904	.58953	.46293	.52650

Table 13. Means of Children with IEPs for Half Day and Full Day Classes - Fall and Spring * = significantly different mean gain scores over time between full and half day classes

	751111100	interj c		ican gam	SCOLES O	or time o	Ct W CCII	Tan ana i	iaii day cias	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Kindergarten Classes and		Social Emotional	Symbolic	General	Oral	Written				
Time	of		Develop-	Develop-	Know-	Commun-	Langua	Math	Work	Attentive
Meas	urement		ment	ment*	ledge	ication	ge*	Concepts	Habits	Behavior
	Fall	Mean	2.0972	2.0296	2.0333	2.2431	1.4087	1.9299	2.2302	2.2302
day	N= 18	Std. Dev.	.60262	.70811	.75250	.68663	.56126	.80419	.69493	.68097
	Spring	Mean	2.5139	2.5278	2.5889	2.6042	2.3849	2.5694	2.5317	2.4444
	N=18	Std. Dev.	.47140	.52782	.49928	.48932	.88034	.51539	.53183	.68053
	Total	Mean	2.3056	2.2787	2.3111	2.4236	1.8968	2.2497	2.3810	2.3373
	N=36	Std. Dev.	.57356	.66534	.68955	.61548	.88004	.74048	.62876	.67970
Full	Fall	Mean	2.0899	1.7743	2.0222	2.0894	1.1301	1.7821	2.1489	2.0057
day	N=144	Std. Dev.	.70241	.62313	.57449	.70225	.63284	.63967	.67326	.71320
	Spring	Mean	2.4800	2.6294	2.6486	2.6372	2.4871	2.6145	2.5060	2.3601
	N=144	Std. Dev.	.48686	.48909	.44846	.51957	.66769	.46677	.49570	.61473
	Total	Mean	2.2850	2.2003	2.3354	2.3633	1.8086	2.1998	2.3287	2.1835
	N = 288	Std. Dev.	.63413	.70451	.60256	.67490	.94001	.69709	.61606	.68776
Total		Mean	2.0907	1.8027	2.0235	2.1065	1.1611	1.7987	2.1580	2.0308
	N = 162	Std. Dev.	.69034	.63585	.59409	.70010	.62983	.65894	.67399	.71115
	Spring	Mean	2.4838	2.6180	2.6420	2.6335	2.4757	2.6095	2.5088	2.3695
	N = 162	Std. Dev.	.48385	.49288	.45311	.51494	.69198	.47094	.49818	.62069
	Total	Mean	2.2873	2.2091	2.3327	2.3700	1.8184	2.2054	2.3345	2.2006
	N= 324	Std. Dev.	.62689	.69969	.61172	.66793	.93265	.70106	.61672	.68753

Appendix C

Vision for Kindergarten Readiness - Kansas State Department

The Kansas Vision for School Readiness – Kansas children will be ready to succeed in school when:

Each child has a safe, healthy, nurturing learning environment from birth to school age.

Parents have the skills, knowledge and abilities to make well-informed choices and assist children in reaching their potential.

Professionals have the training, skills, and knowledge to encourage and enhance children's learning.

Kansas has an integrated, comprehensive system of programs for families and children.

Agencies and providers work together to support families and children.

Measures of success for the system are clearly identified, tracked, and used to make modifications in programs.

Kansas is nationally known for quality child care and education, thus attracting businesses and families.

Kansans strongly support programs that ensure school readiness.

Adequate financial and human resources are available statewide.

Public-private collaborations ensure that all children have the opportunity to succeed.

Early education is promoted as a profession by training and compensating personnel appropriately.

Retrieved from http://www.ksde.org/Portals/0/Early%20Learning/ELSEC6.pdf

Appendix D

District Size and Number of Half and Full Day Students in the Fall Sample.

District Size and Number of Half and Full Day Students in the Fall Sample.

The school districts in Kansas are diverse in size, ranging from some districts with only one elementary school to upwards of 40 or more elementary schools within one major urban district. The children within the study were selected using a sampling technique based on adequate representation from all sizes of districts, including ensuring that not too many schools from any one district were part of the data collection, but selection was not made on the basis of length of sessions, so that these district sizes may not be totally representative of all the districts in any one classification. In this sample, smaller districts tended to be more than adequately represented in the full day

Kindergarten status. The table below gives specific information about half and full day attendance of participants in the Kansas KAI sample from fall 2007, to illustrate how many children attended full, half, and partial week full days (closely equivalent to half days) beginning with the smallest (1 and 2A) category designated by the Kansas Athletic Classification System through the largest (6A).

Distribution of KAI Fall 2007 Kindergarten Sample by Size

		Number of Students	Percent
1A & 2A combined	Half Day	83	20.0
(Smaller Districts)	All Day	322	78.0
	All day, partial week	8	2.0
	Total	413	
зА	Half Day	13	3.6
	All Day	346	96.4
	All Day, partial week	0	0
	Total	359	
4A	Half Day	250	40.5
	All Day	368	59.5
	All Day, partial week	0	0
	Total	618	
5A	Half Day	49	27.7
	All Day	128	72.3
	Total	177	
6A	Half Day	261	23.8
(Largest Districts)	All Day	828	75.5
	All day partial week	7	.7
	Total	1096	
	Grand Total	2,663	