

# Expanding Full-Day Kindergarten in Jeffco: Who's Right in this Fight?

*by Tom Coyne*

Whether to spend an additional \$600,000 to expand free full-day kindergarten in Jeffco from 40 to 45 schools (and raise the annual cost for this program from about \$4.9 million/year to about \$5.5 million/year) has recently generated strong feelings among a range of people, including Board members and the teachers' union.

I have three children at Wheat Ridge High School, where I chair the Accountability Committee. Over half the students at our school are eligible for free and reduced lunch. As such, I have a very strong interest in any proposal that could significantly and sustainably improve their academic achievement results.

I should also make a couple of other disclosures. First, I'm a registered Independent, though for most of my life I was registered as a Democrat. Second, I have spent thirty years working in the private sector, mostly on performance improvement. In my world, ideological purity is a luxury we cannot afford. Due to the intense competition companies face every day, private sector executives and board members must pragmatically focus on two critical questions about a performance improvement initiative: is it legal and ethical, and does it deliver significant results?

This is the perspective from which I've approached the issue of expanding the full-day kindergarten program in Jeffco, whose goal is to substantially and sustainably improve the academic achievement results of free and reduced lunch eligible students, who now account for about one-third of the District's population. That there is a need to dramatically improve the academic achievement results for these students is beyond doubt, as evidenced by the following table:

Percent Proficient & Advanced -- Students Eligible for Free and Reduced Lunch								
Jeffco TCAP Data from CDE Schoolview/Datalab								
<b>Math</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2009/2010</b>	<b>2010/2011</b>	<b>2011/2012</b>	<b>2012/2013</b>
Grade 3	56	54	53	59	56	58	58	57
Grade 4	53	53	51	53	57	59	60	61
Grade 5	48	43	47	45	49	53	49	50
Grade 6	43	47	47	51	49	54	53	51
Grade 7	28	33	27	35	32	38	39	42
Grade 8	29	28	31	34	34	36	35	36
Grade 9	22	21	23	20	27	23	21	24
Grade 10	16	15	19	16	17	21	20	20
<b>Reading</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2009/2010</b>	<b>2010/2011</b>	<b>2011/2012</b>	<b>2012/2013</b>
Grade 3	54	59	58	64	60	64	66	65
Grade 4	55	48	51	51	58	55	57	59
Grade 5	53	50	56	55	56	60	60	60
Grade 6	56	60	63	62	67	67	71	70
Grade 7	50	48	49	51	54	54	57	58
Grade 8	49	46	52	45	52	50	54	56
Grade 9	47	51	51	51	53	50	53	53
Grade 10	46	50	49	53	47	52	51	57
<b>Writing</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2009/2010</b>	<b>2010/2011</b>	<b>2011/2012</b>	<b>2012/2013</b>
Grade 3	38	42	37	41	35	38	39	36
Grade 4	37	33	35	35	35	44	34	37
Grade 5	44	37	39	39	39	46	44	41
Grade 6	47	46	46	47	46	53	46	50
Grade 7	40	45	39	42	41	42	47	49
Grade 8	33	33	33	32	35	35	37	38
Grade 9	30	31	31	32	32	33	32	37
Grade 10	29	30	30	31	27	30	29	32

As you can see, in each of the past eight years there has been only minimal improvement in the depressing pattern of grade-to-grade decline in free and reduced students' math, writing and reading proficiency. In 2013 a stunning 80% of Jeffco's tenth grade free and reduced students were not proficient in math.

As a high school SAC chair I am acutely aware that, despite their Herculean efforts, our high school teachers cannot make up all the proficiency ground that has been lost in elementary and middle school.

For example, Colorado Department of Education research has concluded that, "if students are not proficient on the [CSAP/TCAP] assessment in sixth grade, they are likely to require remediation in their first year of college." (see "*Shining a Light on College Remediation in Colorado*" by Lefly, Lovell, and O'Brien)

Similarly, the ACT's "*Forgotten Middle*" report found that, "under current conditions, the level of academic achievement that students attain by eighth grade has a larger impact on their college and career readiness by the time they graduate high school than anything that happens academically in high school...We need to intervene in the upper elementary grades and in middle school"

Over the past four years, Jeffco's District Performance Plans, which have, per state law, been reviewed by members of the SPAC/DAC, and approved by the Board of Education, have repeatedly identified a range of "major root causes" for Jeffco's poor achievement performance. These include:

- "Students needing to catch-up do not receive quality and/or adequate time for universal/core instruction in addition to effective, aligned targeted/intensive interventions" (2010/2011)
- "Teaching and learning have not consistently demanded high expectations in every classroom due to superficial coverage of a large number of standards, lack of understanding of grade level mastery, lack of relevance for students, and lack of systemic progress monitoring" (2011/2012)
- "The district lacks structures to ensure consistent quality professional development is provided to all instructional staff to address the needs of all populations, including students in the catch-up category" (2012/2013)
- "Educators have received inconsistent training on effective literacy instruction and use of research-based resources" (2013/2014)
- "Math instruction tends not to be differentiated, lacking a variety of structures to meet student needs" (2013/2014)
- "Systemic implementation of intentional lesson design to engage students' conceptual understanding of their learning and increase student cognitive load is not evident in all classrooms" (2013/2014)

These root cause conclusions have been reinforced by comments made to the Board and the SPAC/DAC by Jeffco's Chief Academic Officer, who has referred to poor "fidelity of implementation" of achievement improvement initiatives in some schools, "widely varying levels of rigor" in Jeffco classrooms, and a "lack of a common understanding in Jeffco of what rigor means."

So we know we have a serious problem in Jeffco with respect to the academic achievement of our free and reduced students, we know that it begins in elementary school, we know that it has persisted for at least eight years, and we believe we understand its most important root causes. It is in this context that we must view the controversy that has developed over the expansion of Jeffco's

current full-day kindergarten program, from 40 to 45 elementary schools, at an incremental annual cost of \$600,000.

Jeffco has offered full-day kindergarten since 2008. Extrapolating from the current budget request, the annual cost per year of the program through this budget year has been about \$4.9 million per year [ $\$600,000 / (5/45) - \$600,000$ ], or about \$29 million over the last six years.

As a member of the SPAC Budget Review Subcommittee, I have noted that before approving the requested \$600,000 increase, the Board needs to answer three key questions:

1. The extent to which the proposed expansion of full-day kindergarten will address the root causes of poor achievement results noted above, in comparison to other proposed uses of scarce budget funds.
2. Whether the current design of Jeffco's current full-day kindergarten program is efficient.
3. The evidence, if any, that Jeffco's existing full-day kindergarten program has had a systematic positive impact on achievement results for free and reduced eligible students, and the magnitude of that impact.

With respect to the first question, the lack of full-day kindergarten for free and reduced eligible students has never been listed in a District Performance Plan as a major root cause of Jeffco's poor achievement results for these students.

With respect to the second question, surrounding districts like Cherry Creek and Denver Public Schools require the families of students who are not eligible for free and reduced lunch to pay for full-day kindergarten. In Jeffco, both free and reduced and non-free and reduced students receive free full-day kindergarten if they live in the articulation area for (or choice into) one of the 40 elementary schools where it is offered. If they don't attend these schools, they do not receive full-day kindergarten. Since the primary purpose of full-day-kindergarten is to improve free and reduced students' academic achievement, Jeffco's program design is much less efficient than Cherry Creek's or Denver's.

With respect to the effectiveness of full-day kindergarten in significantly and sustainably increasing free and reduced students' academic achievement scores, when the Board asked District staff for a background briefing on this issue, they received the appended memo.

As you can see, the District's briefing memo only mentions studies that support the efficacy of full-day kindergarten (e.g., studies from 2005 and 2008). I find it deeply troubling that the District staff memo failed to note that there are also

many studies that have concluded that full-day kindergarten does not have a lasting positive impact on student achievement.

For example, in 2005 the RAND Corporation found that, relative to half-day kindergarten, “there are initial benefits for students and the mothers of students that attend full-day kindergarten, but these differences largely evaporate by third grade. Contrary to claims by some advocates, attending full-day kindergarten is found to have no additional benefit for students in families with income below the poverty threshold” (*Is Full Better than Half? Examining the Longitudinal Effects of Full-Day Kindergarten Attendance* by Cannon, Jackowitz, and Painter).

Also in 2005, a trio of researchers from the U.S. Department of Education’s Institute of Education Sciences and the American Institutes for Research analyzed a national data set of 22,782 children who had attended 1,277 different schools and concluded, “the reading score growth per month is .04 points lower (effect size =.10) for children who attended full-day kindergarten compared to those who attended half-day kindergarten...No difference was detected for the growth of mathematics scores. These findings suggest that children who attended public school full-day kindergarten classes did not maintain their advantage over the three years after kindergarten” (*Do The Greater Academic Gains Made by Full-Day Kindergarten Children Persist Through Third Grade?*).

A year later, in 2006, RAND published another analysis of the same issue, *School Readiness, Full-Day Kindergarten, and Student Achievement: An Empirical Investigation* by Le et al. This study found that “attendance in a full-day kindergarten program was not related to achievement in mathematics in fifth grade except when nonacademic school readiness factors were included in the model. When those factors were considered, full-day attendance was negatively related to math achievement. In other words, after controlling for nonacademic readiness at kindergarten, children who had attended a full-day program at kindergarten showed poorer mathematics performance in fifth grade than did children who had attended a part-day kindergarten program...[Also] attendance in a full-day kindergarten program was negatively associated with attitudes toward learning, self-control, and interpersonal skills, and was positively related toward internalizing (measured by a scale indicating presence of anxiety, loneliness, low self-esteem, and sadness) and externalizing behaviors...Our analyses reinforce the findings of earlier studies that suggest that full-day kindergarten programs may not enhance achievement in the long term.”

As opposed to single studies of the full-day kindergarten issues, “meta-analysis” studies are more powerful because they compare the results of different single studies of an issue, and combine their conclusions on the basis of the strength of the methodology used in each study. Two recent meta-analyses of full-day kindergarten have reached the same conclusion. In *Effects of Full-Day Kindergarten on Academic Achievement and Social Development*, Cooper et al concluded in 2010 that “attending full-day kindergarten had a positive association

with academic achievement (compared to half-day kindergarten) equal to about one quarter standard deviation [i.e., an Effect Size of .25] at the end of the kindergarten year. But the association disappeared by third grade.”

And in January 2014, in “*Full-day Kindergarten: A Review of the Evidence and Benefit-Cost Analysis*,” Kay and Pennucci of the Washington State Institute for Public Policy Analysis ([www.wsipp.wa.gov](http://www.wsipp.wa.gov)) concluded that “full-day kindergarten leads to higher standardized test scores than half-day programs, but this effect appears to fade out within a few years.”

If District staff did not know about the existence of these studies, then Jeffco has a serious competence problem. If staff knew about these studies but decided not to include them in the Board briefing memo, then Jeffco has a serious governance problem. Take your pick – the implications of both are ugly indeed.

Another critical issue is that any national study of the effectiveness of an achievement improvement approach must be seen in light of the evidence regarding Jeffco’s poor “fidelity of implementation” of these initiatives. The fact that full-day kindergarten may have produced achievement improvement elsewhere is no guarantee that it will do so in Jeffco. For this reason, and in light of the conflicting national evidence about the effectiveness of full-day kindergarten, it is reasonable and responsible to analyze the results of Jeffco’s existing program before increasing our spending on full-day kindergarten from \$4.9 to \$5.5 million per year.

However, I was absolutely stunned to discover that during the six years that \$29 million in taxpayer funds has been spent on full-day kindergarten in Jeffco, previous Boards, Strategic Planning Advisory Councils, and District Accountability Committees have never asked for a rigorous quantitative analysis of the program’s effectiveness in achieving its stated goal of improving the academic achievement results for free and reduced eligible students (see M. Hoefner quote in “*Jeffco Board Balks at Expanding Free Full-day Kindergarten*”, [Chalkbeat.org](http://Chalkbeat.org), April 28, 2014). This represents a comprehensive failure of the District’s management, governance, and oversight processes that should be deeply worrying to taxpayers concerned with the stewardship of Jeffco’s billion dollars per year budget.

Staff has asserted the full-day kindergarten program is important, but, as yet, has not backed up that assertion with solid data and high quality analysis. Simply repeating something does not make it true. Jeffco staff’s approach would certainly not fly with a private sector board.

However, for a number of reasons, Jeffco’s lack of analysis doesn’t surprise me.

First, in comparison to other school districts like Cherry Creek and Denver (much less private sector companies), Jeffco seems to undertake much less quantitative

analysis of its achievement results, and its decisions about how to spend a billion dollar budget seem to be much less data-driven.

Second, based on a review of the full-day kindergarten schedules that were posted on 24 Jeffco elementary schools' websites, it appears that there is no consistency in their offerings. Full-day kindergarten time in school varies by as much as 15 minutes per day. That means some schools provide 75 minutes more time in class per week than others. However, half-day kindergarten can vary as much as 30 minutes per day. That means some schools provide 150 minutes more time in class per week than others. Moreover, depending on the subject, some half-day kindergarten classes are providing as much math or reading and writing as some full-day classes. For example, Devinney half-day provides three times more math time than Parmalee's full-day program, and reading and writing at Mitchell half-day is only 5 minutes less than Prospect Valley's full-day program. In light of the widely varying ways in which full-day kindergarten has been implemented at different Jeffco elementary schools, it would be quite a challenge to draw any high quality analytical conclusion about the effectiveness of this program compared to half-day kindergarten in significantly and sustainably improving free and reduced students' academic achievement results.

Finally, I completed my own analysis to compare the changes in Grade 3 TCAP reading, writing, and math results over the past three years for free and reduced eligible students who are neither special education (IEP) or GT (ALP) at the elementary schools that have offered full-day kindergarten and where sufficient public data is available (the data set can be downloaded from [www.k12accountability.org](http://www.k12accountability.org)). The metric I use to evaluate elementary schools is Effect Size, which is equal to the end year average TCAP scale score less the beginning year average TCAP scale score, divided by the end year standard deviation of TCAP scale scores. Based on the well-known research of professor John Hattie (see his book, Visible Learning), an Effect Size of .30 is roughly equal to an additional year of learning (or a lost year, if the Effect Size is negative .30 or more). The question I asked was if the results show consistent, significant, positive Effect Sizes at the elementary schools that are offering free full day kindergarten.

Schools with Full Day Kindergarten				
With N>16 F&R, Not GT, Not IEP students in both 2010 and 2013				
Grade 3 TCAP Scores Three Year Effect Sizes* Between 2010 and 2013				
School	Math	Reading	Writing	Average
Allendale	0.02	(0.03)	(0.02)	(0.01)
Campbell	(0.92)	(0.42)	(0.74)	(0.69)
Deane	(0.02)	0.26	0.26	0.17
Edgewater	0.01	0.40	(0.12)	0.10
Eiber	0.50	0.05	0.06	0.20
Foster	(0.03)	(0.20)	(0.55)	(0.26)
Glennon Heights	0.20	(0.10)	0.37	0.16
Kullerstrand	(0.35)	(0.22)	(0.34)	(0.30)
Lasley	0.03	0.15	(0.10)	0.03
Lawrence	(0.28)	0.11	0.11	(0.02)
Little	(0.23)	0.45	0.15	0.12
Lumberg	0.34	0.05	(0.29)	0.03
Molholm	0.19	0.52	0.23	0.31
Parr	(0.13)	(0.34)	(0.63)	(0.37)
Peck	0.13	0.12	0.38	0.21
Pennington	(0.79)	0.07	(0.06)	(0.26)
Pleasant View	(0.18)	(0.17)	0.04	(0.10)
Secrest	0.29	0.36	(0.09)	0.19
Slater	0.60	0.87	1.01	0.83
South Lakewood	0.36	0.40	0.45	0.40
Stein	(0.11)	(0.03)	(0.28)	(0.14)
Stevens	0.48	(0.03)	0.19	0.21
Stober	0.05	0.20	0.63	0.29
Swanson	(0.88)	0.09	(0.52)	(0.44)
Thompson	(0.24)	0.03	0.11	(0.03)
Warder	0.38	0.44	0.49	0.44
Weber	(0.07)	0.14	0.21	0.09
Welchester	(0.63)	(0.75)	(0.17)	(0.52)
Westgate	(0.35)	(0.13)	(0.13)	(0.20)
Wilmore Davis	(0.52)	0.42	0.52	0.14
Average	(0.07)	0.09	0.04	0.02

\*Effect Size = (ending year average TCAP scale score less beginning year score)/ending year standard deviation

\*Effect Size of .30 is roughly equal to a full year of learning (see the book Visible Learning, by Professor John Hattie)



As you can see, this analysis does not show any systematic improvement in Grade 3 free and reduced eligible students' TCAP scale scores in math, reading, or writing across all the schools that offer full-day kindergarten. To be sure, there are schools that have demonstrated a very impressive ability to increase Grade 3 F&R TCAP scores over time. But there are also schools that have produced exactly the opposite results. These findings reinforce the point that one of Jeffco's most critical achievement improvement challenges is how to develop a better process for identifying, understanding, and effectively scaling up the most successful initiatives from the school level experimentation and learning that is underway across the district.

Obviously, one can criticize this analysis as being too coarse grained, as it is necessarily based on public data for Grade 3, while the District has access to other non-public assessment results from grades K through 3 (e.g., it could have done randomized control trials on the long-term achievement effect of a F&R student being assigned to the full-day treatment or half-day treatment in schools that offer FD kindergarten, and comparing these results to F&R students who attend schools that don't offer FD kindergarten). Clearly, other confounding factors could account for the observed results in the Grade 3 data, including differences across schools in full-day kindergarten program structure, curriculum, instructional practices, teacher and/or principal quality.

I should also note that a group of parents who support the expansion of full-day kindergarten in Jeffco has also produced an analysis to support their position (see the presentation by Gudikian, Johnson, et al). While I deeply admire their initiative and desire to base decisions on data, their analysis unfortunately fails to extend beyond kindergarten (and address the issue of benefit disappearance by Grade 3), covers only a few schools, fails to estimate Effect Sizes, and fails to separately break out results for the free and reduced eligible students whose academic achievement improvement is the goal of the full-day kindergarten program.

The limitations of both these analyses reinforce the critical need for a high quality quantitative analysis of the effectiveness of Jeffco's existing full-day kindergarten program that is based on detailed, non-public data before any decision is made by the Board to spend additional taxpayer money to expand it.

A promising step in this direction is a study that was done by Denver Public Schools. While it also showed declining achievement benefits over time, it found some residual positive benefit still remained in Grade 3. If the methodology underlying this study is robust (i.e., if it meets the high quality standard set by the What Works Clearinghouse, part of the US Department of Education's Institute of Education Sciences), if its results can be replicated using Jeffco data, and if the resulting Effect Size is significantly positive, then the Board should support the expansion of full-day kindergarten in Jeffco.

Unfortunately, the need for a data-driven decision on expanding full-day kindergarten in Jeffco is apparently not shared by either Lesley Dahlkemper (a current member and former President of the Jeffco Board of Education) or by the Jeffco teachers' union. Both demanded last Thursday night that the Jeffco Board of Education approve the expansion of full-day kindergarten even in the absence of high quality analytical evidence that the current program is actually achieving its intended results.

Rather, it seems they would spend an additional \$600,000 in taxpayer funds on full-day kindergarten – which would increase the annual program cost to about \$5.5 million -- solely on the basis of anecdote, ideology, and emotion. As a private sector board member, I do not see how this is consistent with board members' duty of care when it comes to allocating district resources.

Nor do I see how this is consistent with the professional ethics of our teachers, who I would have expected to demand that Jeffco's limited resources be allocated in a manner that has, on the basis of high quality data and analysis, the highest probability of delivering significant academic achievement improvements for the District's students. It is hard to imagine a group of doctors demanding that a hospital use a certain medical treatment on our children solely on the basis of anecdote, ideology and emotion.

I also do not imagine that either Ms. Dahlkemper or the Jeffco teachers' union would support the expansion of charter schools solely on the basis of anecdote, ideology, and emotion.

In sum, it is clear that Jeffco faces very serious academic achievement shortfalls, particularly for our free and reduced students. These shortfalls have largely resisted improvement for the past eight years, despite recognition of their root causes by staff, by the SPAC/DAC, and by previous Boards of Education. We have a clear moral obligation to these students and their parents to pragmatically allocate Jeffco's scarce resources to initiatives that, on the basis of high quality data and analysis, have the best chance of improving this terrible track record.

Contrary to what some may claim, this very reasonable and rational path seems to be the one that Ken Witt, Julie Williams, and John Newkirk are taking regarding the expansion of Jeffco's full-day kindergarten program. As they continue down that path they deserve our full support.

*Tom Coyne chairs the Wheat Ridge High School Accountability Committee and recently joined Jeffco's Strategic Planning and Advisory Council. He has worked on corporate performance improvement issues for more than 30 years.*

## **Executive Summary**

### **April 3, 2014**

#### **Program Objective:** *Free Full Day Kindergarten*

**Overview:** *The district does not currently have free full day kindergarten in all schools. The \$600,000 would support the addition of 13 more full day kindergarten sections.*

**Project Description:** *Expand free full day kindergarten to 13 more sections*

#### **Call to Action Objective:**

*The proposal aligns with BOE Ends 1 and Ends 2 which ensures high quality learning experiences are provided to increase student achievement for all students to meet the Board Goals focusing on Reading, Math, Writing, and Remediation Rates.*

#### **Specifically:**

*Ends 1: Every student will master the Colorado Content Standards at grade level.*

- The percentage of proficient/advanced third grade students in reading on TCAP will increase from 80% to 85% by August of 2015.*
- The percentage of proficient/advanced fourth grade students in math on TCAP will increase from 77% to 80% by August 2015.*

*Ends 2: Every student will achieve one year's growth or more as needed to 'catch up' in every year of school and be ready for the next level.*

- The percentage of third graders scoring in the unsatisfactory category on third grade reading TCAP will decrease by 1 percentage point each year in 2014 and 2015.*
- The percentage of ALP students who have growth measures over 50 will increase:  
In writing from 54 to 56      In math from 60 to 62      In reading from 57 to 59*

**Why does it matter?** Free full-day Kindergarten provides our at-risk students access to additional instructional time in reading, writing, math, science, and social studies. This additional instructional time delivers benefits to our students throughout their educational career, including increased academic achievement and improved social-emotional skills. This additional instructional time ensures a greater chance for our students to be successful academically, leading to attainment of our Ends Goals on student achievement detailed above.

- "By the time most children start school, they will have been exposed to 5 million words and should know about 13,000 of them...But that doesn't often happen in low-income homes...by age 3, the children of professional parents were adding words to their vocabulary at about twice the rate of children in welfare families." (*Teaching with Poverty in Mind* by Eric Jensen 2009 pg. 35)

**What is the difference?** The difference in time is 205 minutes: students in half day programs receive a minimum of 150 minutes. Students in full day programs receive a minimum of 355 minutes. The difference in time for kids in full day vs. half day is over 35,000 minutes in a typical school year, or about 583 hours of school.

### **What are the benefits?**

Full day Kindergarten will accelerate student learning so that our students have a greater chance of being advanced/proficient by 3rd grade. Research cited below supports the benefits of full-day kindergarten:

- According to the Center for Public Education, full-day kindergarten provides low-income students with academic gains that lead to reduction in the number of students being retained. Children who attended a full-day program tend to score higher on skills tests in later grades than those who attended half-day programs.  
<http://everydaylife.globalpost.com/full-day-kindergarten-its-positive-effects-poverty-6961.html>
- Quality kindergarten and elementary education is about the exposure to best instructional practices for all students which will positively impact student achievement. "Children who learn more and have more experienced teachers in kindergarten have better outcomes as adults, including higher earnings, as well as increased college attendance, homeownership rates and retirement savings."  
<http://www.aecf.org/~media/Pubs/Initiatives/KIDS%20COUNT/F/FirstEightYears/AECFTheFirstEightYears2013.pdf>
- A nationwide analysis of kindergarteners who began at the same achievement level found that students who attended full-day programs outperformed half-day students in both math and reading

(Votruba-Drzal, Li-Grining and Maldonado-Carreno 2008).

<http://radnortsd.schoolwires.com/cms/lib/PA01000218/Centricity/Domain/797/Full%20versus%20half%20day%20kindergarten.pdf>

- "In Nevada, evaluations of the effect of full-day kindergarten on student academic achievement have shown positive results. A first-year study by the Clark County School District (CCSD) assessed the effects of participating in full-day and half-day kindergarten on students' literacy development. The December 2005 report, titled Status Report on Year 1: Full/Extended-Day Kindergarten Study (FEDS), found that lower socioeconomic students enrolled in full-day kindergarten demonstrated greater rates of literacy growth over the course of the year than closely matched half-day students."  
<http://leg.state.nv.us/Division/Research/Publications/ResearchBriefs/FullDayKindergarten.pdf>

**Time Sensitivity:** High Importance - Due to the expansion of classrooms, staff will need to be hired prior to the 2014-15 school year.

**Timeline:** 2014 - 2015 School Year

**Recommendation:** The Board approve funds for 13 additional sections of free full day kindergarten.