

# April 2008

Report No. 08-23

# 61% of Voluntary Prekindergarten Children Are Ready for Kindergarten; Accountability Process Needs Improvement

# at a glance

More than half (61%) of children who attended Florida's Voluntary Prekindergarten (VPK) Program in 2006-07 were subsequently deemed to be ready for kindergarten and demonstrated higher levels of kindergarten readiness than children who did not attend the program. Children attending the VPK school-year program had similar kindergarten readiness rates to those who attended the VPK summer program.

The method the Department of Education uses to rate VPK providers can result in identifying some as low performing even though a greater percentage of children they serve are deemed kindergarten ready on all readiness measures than those providers not identified as low performing. Modifying the readiness rating methodology would substantially address this issue. The rating method also excluded 521 (10%) providers in 2006-07. Of those providers excluded 45% were not rated because of a lack of screening results. The department is working to address this problem.

Providers who were deemed 'low performing' were more likely to serve at-risk or minority children who may enter the VPK program substantially behind other children. As these providers can lose program eligibility if they do not improve readiness outcomes, it will be critical to provide them with timely assistance to improve performance and maintain program access for atrisk and minority children.

# Scope-

The Florida Legislature directed OPPAGA to conduct an evaluation of the state's Voluntary Prekindergarten Education Program. The report addresses two questions.

- What percentage of children who participated in the program was subsequently classified as ready for kindergarten?
- Did the Department of Education use reasonable methodologies to determine children's kindergarten readiness and provider readiness rates?

# Background

On November 5, 2002, Florida voters approved Amendment 8 to Article IX of the Florida Constitution creating the state's universal prekindergarten program. Subsequently, the 2003 and 2004 Legislatures created a free, voluntary prekindergarten education (VPK) program for Florida children four years of age beginning with the September 2005 school year. <sup>1</sup> The state's VPK program is intended to provide developmentally appropriate services that increase children's chances of achieving future educational success.

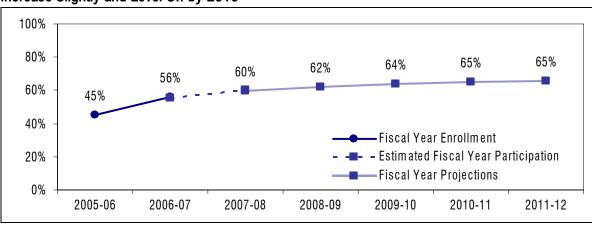
The VPK program is administered by three state agencies and local early learning coalitions. The Agency for Workforce Innovation has primary responsibility for adopting and maintaining coordinated program, administrative, and fiscal policies, while the Department of Education is primarily responsible for developing

<sup>&</sup>lt;sup>1</sup> Chapters <u>2003-93</u> and <u>2004-484</u>, *Laws of Florida*.

educational standards and measuring program outcomes. In addition, the Department of Children and Families oversees licensing of child care centers, including VPK providers. The state's 31 local early learning coalitions coordinate and implement the VPK program in their service areas. The coalitions must follow the standards, policies, and rules established by the Agency for Workforce Innovation and the Department of Education.<sup>2</sup> Coalitions serve one or more counties and contract with providers, such as private child care centers and public schools, to offer VPK program instruction. The coalitions also can use subcontractors for certain administrative services related to the VPK program.

In 2006-07, approximately half of the state's fouryear-olds attended Florida's VPK Program. In 2006-07 (the most recent year for which complete data is available), the VPK program served 123,071 children. <sup>3</sup> The majority (112,857 or 92%) of these children attended the program during the regular school year, while 8% of children participated in the summer VPK program. Enrollment in the VPK program is projected to increase over time. In 2006-07, the program served approximately 56% of the state's four-year-olds, a nine percentage point increase from 2005-06. The March 2008 VPK Estimating Conference Report predicts that the program will serve a larger percentage of the state's eligible four-year-olds in each of the next three years. By 2009-10, the estimating conference predicts that approximately two-thirds of all eligible four-year-olds will participate in the VPK program (see Exhibit 1).

In 2007-08, the Legislature appropriated \$350 million to the VPK Program. Florida's VPK program is funded entirely through state resources. For Fiscal Year 2007-08, the Florida Legislature appropriated approximately \$344 million from general revenue to the Department of Education for transfer to the Agency for Workforce Innovation to implement the VPK program (see Exhibit 2). The department also received \$1.8 million in general revenue in the 2007-08 appropriation for improving early learning standards and accountability.<sup>4</sup>



## Exhibit 1 The Percentage of Four-Year-Olds Participating in the VPK Program Is Expected to Increase Slightly and Level Off by 2010

Source: Office of Economic and Demographic Research Estimating Conference Report, March 2008.

<sup>&</sup>lt;sup>2</sup> To enhance learning activities for children, the Legislature created the School Readiness program in 1999 from the former subsidized child care program, a federally funded program for low income or at-risk children.

<sup>&</sup>lt;sup>3</sup> The department reports a duplicated count of 130,853 because some children are served by more than one provider during the year.

<sup>&</sup>lt;sup>4</sup> The Governor vetoed \$1.6 million of \$3.5 million in general revenue appropriated for the department to assist instructors to automate the collection of VPK screening data. House Bill 7009 special appropriations, FY 2007-08, further reduced grants and aids to the department for early learning standards and accountability by \$74,821. The most recently appropriated reduction of approximately \$6.7 million has not been signed by the Governor yet.

# Exhibit 2

## The Legislature Has Appropriated \$1.1 Billion to the VPK Program Since 2005-06. However, the Agency Reverted Approximately \$257,000 in the First Two Years.

Legislative			
Fiscal Year	Appropriation	Reversions <sup>1</sup>	
2005-06	\$ 387,137,762	\$159,080,602	
2006-07	388,100,000	97,693,098	
2007-08	343,750,562 <sup>2</sup>		
Total	\$1,118,988,324	\$256,773,700	

<sup>1</sup> The Agency for Workforce Innovation returned these funds because enrollment was lower than anticipated.

<sup>2</sup> The Governor vetoed an additional \$1.6 million in general revenue for the department to assist instructors to assess student readiness for kindergarten. House Bill 7009 special appropriations, FY 2007-08, further reduced grants and aids to the department for early learning standards and accountability by \$74,821. The most recently appropriated reduction of approximately \$6.7 million has not been signed by the Governor yet.

Source: General Appropriations Acts of 2005, 2006, and 2007.

**The Department of Education has primary responsibility for assessing kindergarten readiness.** The Department of Education is responsible for establishing VPK performance standards, adopting a readiness screening, and calculating provider readiness rates. <sup>5</sup> To evaluate student readiness for school, Florida law requires that children's readiness screening take place within their first 30 days of kindergarten.

The department adopted child performance standards for the VPK program in March 2005. Pursuant to Florida law, these standards describe what children should know and be able to do at the end of the VPK program in the areas of social, cognitive, emotional and motor development, physical health, language and communication, approaches to learning and emergent literacy.

In March 2006, the department also adopted the Florida Kindergarten Readiness Screener instrument to assess children's readiness for kindergarten. This screener is composed of two instruments, the Early Childhood Observation System and two measures of the Dynamic Indicators of Basic Early Literacy Skills that together measure various indicators of classroom readiness, alphabet recognition, and initial sound recognition.

In the summer of 2006, the department, in collaboration with Harcourt Assessment, Inc., school district staff to train test trained administrators on how to assess children's level of readiness on each item included on the screening instrument. The department's training included information on making accommodations for screening children with disabilities pursuant to Florida law. In the fall of 2006-07, public school districts began assessing kindergarten children the Florida Kindergarten Readiness using Screener instrument in the first 30 days of kindergarten to assess the children's readiness in relation to the VPK standards.

As required by law, the State Board of Education adopted a methodology to calculate kindergarten readiness rates and identify cutoff scores for lowperforming VPK providers each year. Each provider's kindergarten readiness rate is based on their students' screening results, and is expressed as the percentage of the provider's students who are ready for kindergarten.

# Findings -

Our analysis of the kindergarten readiness screening results for children who entered public kindergarten programs in 2006-07 showed that children who attended the state's VPK program generally had higher readiness ratings than children who did not attend the program. Children with disabilities, limited English proficiency, Hispanic and African American children showed the strongest benefit from participating in the VPK program. However, the process that the Department of Education uses to evaluate VPK providers and identify low performing entities needs to be improved, as the current process can penalize providers that have overall results that exceed those of providers who are not identified as low performing.

<sup>&</sup>lt;sup>5</sup> Sections <u>1002.67</u>, 1002.69, and 1002.73, *F.S.* 

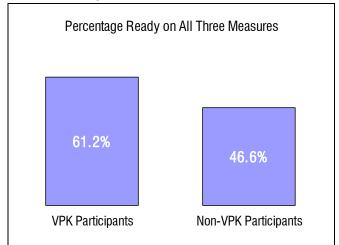
# Children who attended VPK were more likely than other children to be ready for school

As shown in Exhibit 3, more than half (61%) of the children who attended the VPK program in 2006-07 were subsequently found to be ready for kindergarten in all three areas assessed on the Florida Kindergarten Readiness Screener. (See Appendix A for a detailed discussion of our methodology used to analyze kindergarten readiness scores.) These children were able to identify upper and lower case letters, recognize the beginning sounds of spoken words, and demonstrate their mastery of classroom skills essential to learning.

The kindergarten readiness rate of children who attended VPK in 2006-07 was almost 15 percentage points higher than the rate for children who did not attend the VPK program (61.2% and 46.6%, respectively). These results are consistent with those in 2005-06, which showed a difference of 12 percentage points between children who attended the VPK program and those who did not. Thus, the VPK program appears to be successful in helping ensure that children enter kindergarten ready to learn.

## Exhibit 3

## Children Who Attended VPK Were More Likely to Be Ready for School Than Children Who Did Not Attend the Program



Source: OPPAGA analysis of Department of Education and Agency for Workforce Innovation data.

Children who participated in VPK were most successful at demonstrating classroom behavioral skills essential to their success in kindergarten. Children entering public school kindergarten are screened in three areas within their first 30 days of school to determine their readiness to learn. These areas are classroom skills, alphabet recognition, and initial sound recognition. In each of these three skills areas, a higher percentage of children who participated in VPK were deemed to be ready for school than those children who did not participate in the program.

The classroom skills area assesses children's development of critical language and literacy, mathematics, social and personal skills, and physical development and fitness. These areas are assessed with a subset of the Early Childhood Observation System, which examines a child's skills in 19 classroom activities, including the ability to listen to stories, follow classroom rules, and put away material in the appropriate place. Children who consistently demonstrate appropriate skill development emerging/progressing or skill development in these areas are considered ready for kindergarten. As shown in Exhibit 4, VPK children scored the highest on classroom readiness skills, as 92% of children assessed were deemed ready in this area, compared to 84% of the children who did not attend VPK.

Children scored somewhat lower in the areas of letter naming and initial sound recognition, both of which are assessed using subsets of items the Dynamic Indicators of Basic Early Literacy Skills. Approximately 81% of the children who participated in VPK were determined to be able to identify at least eight upper and lower case letters in one minute, compared to 64% of children who did not participate in the program. Similarly, 70% of children who attended VPK in 2006-07 were able to recognize beginning sounds of at least 8 of the 16 words presented to them within a specified time limit, compared to 62% of the children who did not attend the VPK program. The lower success rate of children on the sound recognition assessment may be related to the complexity of the tasks required.

For example, while the alphabet recognition assessment asks a child to name as many letters as possible presented within a minute, readiness on initial sound fluency is multidimensional in nature, requiring children to identify a picture presented out of several pictures that represents the initial sound produced by an administrator.

## Exhibit 4

VPK Children Were Most Ready in the Classroom Skills Development Area and More Likely to Be Ready Than Other Children in Each of the Three Areas Assessed

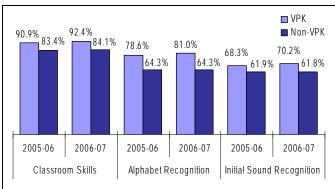
	Percentage VPK Only	Percentage Non-VPK	Percentage Difference - Children Ready	
	<b>s</b> language and litera and physical develo	<b>3</b> /	·	
Ready	92.4%	84.1%	8.3%	
Not Ready	7.6%	15.9%		
Alphabet Recog Ability to name	n <b>ition</b> upper and lower ca	ise letters		
Ready	81.0%	64.3%	16.7%	
Not Ready	19.0%	35.7%		
Initial Sound Recognition Ability to recognize and produce beginning sounds in a spoken word				
Ready	70.2%	61.8%	8.4%	
Not Ready	29.8%	38.2%		

Note: This analysis includes all children who attended VPK for any period of time during 2006-07.

Source: OPPAGA analysis of the Department of Education data.

**Kindergarten readiness has improved over the past two years.** The kindergarten readiness of children attending the VPK program increased slightly in all three assessment areas from 2005-06 to 2006-07. (See Exhibit 5.)

#### Exhibit 5 Kindergarten Readiness Increased Slightly from 2005-06 to 2006-07



Note: This analysis includes all children who attended VPK for any period of time during 2005-06 or 2006-07. Source: OPPAGA analysis of the Department of Education data.

Appendix B contains more detailed performance information for VPK and non-VPK children on the Florida Kindergarten Readiness Screener.

There were large differences in kindergarten readiness assessment results between at-risk and minority children who attended the VPK and those who did not attend the program. Children with disabilities, limited English proficiency, Hispanic and African American children who attended VPK showed substantially higher kindergarten readiness than similar children who did not attend the program. As shown in Exhibit 6, the largest difference was between program and non-VPK children with limited English proficiency (almost 25 percentage points) and children with disabilities (approximately 23 percentage points). Similarly, approximately 54% of the Hispanic children who attended the program were deemed ready for kindergarten, compared to only 31% of the Hispanic children who did not attend VPK. Although children from low-income families experienced the smallest difference by program participation, the impact was still considerable. Readiness rates were approximately 15 percentage points higher for low-income children who participated in VPK program.

## Exhibit 6

## At-Risk and Minority Children Who Attended VPK Had Higher Readiness Assessments Than Similar Children Who Did Not Participate in the Program

Readiness on All Measures	VPK	Non- VPK	Difference
	VFN	VFN	Difference
English Language Learners /Limited English Proficient	48.4	23.8	24.6
Children with Disabilities	56.1	32.9	23.2
Hispanic children	53.6	30.9	22.7
African American children	56.6	41.0	15.6
Children eligible for			
free/reduced lunch	48.9	33.6	15.3

Source: OPPAGA analysis of the Department of Education data.

These findings are consistent with national research. This research indicates that participation in preschool education programs is a promising strategy to boost academic achievement and to narrow the kindergarten readiness gap for children with certain risk factors. These risk factors include children with non-English speaking parents, from low income families, or with disabilities.

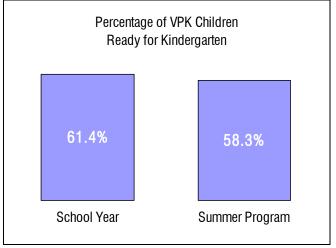
Children attending the school year program had similar kindergarten readiness rates to those who attended the VPK summer program. As indicated in Exhibit 7, children attending the VPK school-year program were slightly more likely (by percentage points) to be ready for 3.1 kindergarten on combined readiness measures than those attending the VPK summer program. Children attending summer programs tended to be older, were more likely to have disabilities and come from low-income households. However, after adjusting our analysis to account for these factors the difference was not statistically significant.

The two VPK programs differ in the number of hours of instruction provided per day, the total number of program hours, and instructor qualifications. <sup>6</sup> However, it is unclear whether these program differences or other factors such as Report No. 08-23

differences in the content and delivery of the curriculum (for which no state-level data exists) may explain children's performance in the two programs. Additional evaluation is needed to determine whether the difference in performance continues and whether it is due to particular program characteristics.

#### Exhibit 7

Children Who Attended the School Year VPK Program Had Similar Kindergarten Readiness Rates to Those Who Attended the Summer Program



Source: OPPAGA analysis of the Department of Education data.

# The department should report additional information on program effectiveness

The department regularly reports the number and percentage of children entering kindergarten ready in each area assessed (classroom skills, initial sound recognition, and letter naming) separately. This disaggregated data is useful in identifying the area or areas in which children are most and least prepared, and thus, for targeting improvements.

However, the department should also report the overall percentage of children fully ready for school. Currently, policymakers and the public cannot readily determine whether the program is achieving its overall objective of ensuring that children start kindergarten ready to learn, as this summary information is not provided. The department should also report the total percentage

<sup>&</sup>lt;sup>6</sup> Section <u>1002.55</u>, *F.S.*, requires the school year program to include 540 instructional hours and instructors to have at least a child development associate credential. Section <u>1002.61</u>, *F.S.*, requires the summer school program to include 300 instructional hours and instructors to be certified teachers or to have a higher education credential.

of children in Florida who meet the state's kindergarten readiness standards in all areas.

# The process the department uses to identify low performing providers has shortcomings

As required by law, the State Board of Education in March 2007 approved a methodology to identify low performing VPK providers.<sup>7</sup> However, the methodology has shortcomings and can penalize providers that have overall results that exceed those of providers who are not identified as low performing. The methodology also does not assess many providers who serve relatively few children, and could result in sanctions against providers who primarily serve at-risk and minority children.

The department's kindergarten readiness ratings do not hold providers accountable for the percentage of children ready for kindergarten on all three measures. State Board of Education rule establishes a process to assess the performance of VPK providers by calculating the percentage of children served by each provider who are subsequently determined to be ready for school when they enter kindergarten. The department determines the percentage of children who are found to be ready for kindergarten on each of the three individual screening measures and then sums these percentages.<sup>8</sup> Thus, if 100% of a provider's children are determined to be ready for kindergarten on all three measures, the provider receives the maximum of 300 points, while a provider would receive a score of 250 if 90% of their children are deemed ready in classroom skills, while 85% are deemed ready in letter recognition and 75% are deemed ready in initial sound recognition.

In December 2007, the State Board of Education established a minimum provider readiness rate of 211 in 2006-07. Providers who achieve lower rates are to receive technical assistance, and they may be dropped from the program if they continue to be identified as low performing providers. The board set the minimum readiness rate at 211 in 2006-07 to meet the statutory requirement that no more than 15% of providers be identified as low performing and subject to sanction.<sup>9</sup> For the 2006-07 school year, 689 providers (15% of 4,595 providers were rated as low performing).

A weakness of this approach is that it can result in designating providers as low performing even though a higher percentage of the children they serve are determined to be fully ready for school than those served by a provider not designated as low performing. This is the result of the rating formula's sensitivity to a relatively high score on any one of the three measures. For example, as shown in Exhibit 8, in 2006-07 one provider achieved a rating score of 220 and was not designated as low performing, as 100% of the children were deemed ready in classroom skills but only 60% were deemed ready in alphabet recognition and 60% were deemed ready in sound recognition; however, only 20% of this provider's children were fully ready for kindergarten. In contrast, another provider was designated as low performing as 77%, 69%, and 62% of the attending children were deemed ready in the three respective areas of assessment; this provider received a rating of 208 even though 58% of the students were fully ready for kindergarten.

#### Exhibit 8

Providers Designated as Low Performing Could Have
a Greater Percentage of Children Ready for School
Than Providers Who Are Not Designated

Readiness Area	Provider A Low Performing	Provider B
Classroom Skills	77%	100%
Alphabet Recognition	69%	60%
Sound Recognition	62%	60%
Provider Readiness Rating	208	220
Overall Readiness in All Areas	58%	20%

Source: OPPAGA analysis of 2006-07 VPK provider readiness ratings.

Our analysis of the 2006-07 readiness ratings found that several providers rated as low performing had a higher percentage of children

<sup>&</sup>lt;sup>7</sup> Rule <u>6A-1.099821</u>, F.A.C.

<sup>&</sup>lt;sup>8</sup> Section <u>1002.69(5)</u>, *F.S.*, requires the State Board of Education to adopt procedures for the department to rank public school and private providers annually according to how well providers prepare children for kindergarten.

<sup>&</sup>lt;sup>9</sup> Section <u>1002.69(6)(b)</u>, F.S.

who scored ready on all three measures than some providers performing satisfactorily. For example, 479 (12% of 3,906) providers whose performance was considered satisfactory had less than 50% of their children ready on all three measures. In comparison, 64 (9% of 689) providers designated as low performing in 2006-07 had a majority of their children ready on all three measures. To address this issue, the State Board of Education could revise the provider readiness rating methodology to consider the percentage of a provider's children ready on all three kindergarten readiness measures.

The cutoff score for the Early Childhood Observation System should be reevaluated periodically. Another option for improving the accountability process for the department to review the cutoff scores that students must meet to be determined ready for kindergarten, particularly for the Early Childhood Observation System assessment. These scores should be set at a level so that generally students who score above the score are ready for kindergarten and those that score below are not ready on the skills assessed. For the Dynamic Indicators of Basic Early Literacy Skills assessments, the Florida Center for Reading Research conducted statistical reviews of the cutoff scores over several years to determine whether they continue to provide an accurate prediction of a child's future reading abilities. However, for the Early Childhood Observation System assessment this type of analysis is not done annually. This review would help ensure that students who are deemed ready by the assessment are in fact ready for kindergarten in the areas covered by this assessment. Department officials have considered examining the appropriateness of the current Early Childhood Observation System assessment cut score.

Almost one-half of all unrated VPK providers in 2006-07 were excluded from the rating because the children they served were not screened on at least one measure. Another weakness in the provider rating system is that it rates only those VPK providers that serve at least four children who were enrolled in the program for at least 70% of the total number of instructional hours offered and were subsequently screened on the kindergarten readiness instruments. <sup>10</sup> Of the 5,116 providers participating in the VPK program in 2006-07, a substantial number (521, or 10%) were not rated because they did not meet these criteria.

Many of these unrated providers (233) served four or more children with 70% program attendance but did not receive a rating because the Department of Education did not have complete readiness screening scores for the minimum four children they served. The department indicates that some of this problem resulted from an inability to match information in its assessment files to enrollment files maintained by the Agency for Workforce Innovation due to inconsistencies in some key data elements, such as Social Security numbers, that the two agencies use to match records. Over the past year the department and the Agency for Workforce Innovation have taken steps to improve data matching. However, the match rate of cases for 2005-06 and 2006-07 remained around 83%.

The department believes that some of the children with incomplete or missing assessment data enrolled in private schools and were not screened although this step is required by Florida law. Section 1002.69(4), *Florida Statutes*, requires that all children who attend the VPK program are to receive kindergarten readiness screenings regardless of whether they are admitted to kindergarten in a public school or nonpublic school. However, the department indicates that it does not have the authority to require nonpublic schools to ensure that this screening is conducted.

The department, local school districts, and coalitions have taken several steps to increase the screening rates of VPK children who attend kindergarten in nonpublic schools. School districts have offered training to nonpublic schools in administering the classroom skills portion of the assessment. The department does not currently permit nonpublic schools to administer the letter and sound recognition portions of the assessment. <sup>11</sup> To increase screening rates, some

<sup>&</sup>lt;sup>10</sup> These criteria are established in Rule 6A-1.099821(4), F.A.C.

<sup>&</sup>lt;sup>11</sup> This policy is intended to provide assurance in the reliability of the assessment results by precluding non-public schools that offer VPK programs from fully rating the kindergarten readiness of children

school districts, such as Broward, have sent staff to nonpublic schools to administer these portions of the assessment. The department has also disseminated contact information to the local coalitions to enable them to provide information to nonpublic schools about training opportunities and screening sites. Department officials indicate that these actions have been successful in increasing the number of nonpublic school children participating in the assessment process from approximately 1,300 in the fall of 2006 to approximately 4,000 in the fall of 2007.

Providers serving high numbers of at-risk and minority children are more likely to lose eligibility to provide VPK services. Providers who served high percentages of children eligible for free and reduced lunch, and those designated as Hispanics or with limited English proficiency, were more likely to be classified as low performing than providers who served other groups of children. This outcome can be problematic for access to program services for these populations because if the providers do not improve their readiness outcomes, they are subject to state sanctions which can include losing eligibility to provide VPK services.

The department could address this situation by offering timely information to low performing providers to help them improve their performance. The department did not release its list of low performing providers for the 2005-06 program year until June 2007, eight months after children served during that year were assessed in kindergarten. The lengthy time frame between the fall 2006 assessment and the June 2007 release of provider ratings was partly due to the department's efforts to verify providers' identification of children who attended the program and the hours of VPK services they received.

Due to this delay, providers who were low performing for the 2005-06 school year did not have the opportunity to request or receive assistance to improve their performance until the 2006-07 school year had been completed. As providers can be sanctioned if they are identified as low performing for three consecutive years, such providers will have relatively little time to improve their performance before they may lose eligibility to provide VPK services. <sup>12</sup>

The department has taken steps to streamline its analytical process, which will enable it to publish provider ratings earlier to allow more time for technical assistance for low performing providers in the future. These actions enabled the department to publish the 2006-07 provider ratings in February 2008, four months earlier than it released the 2005-06 ratings.

The department could also address the impact of sanctions on providers serving large percentages of children who begin the program significantly behind by modifying its rating methodology to consider readiness gains, although there are significant barriers to doing so. Coalition executive directors, VPK providers, and other local stakeholders we contacted asserted that because at-risk students enter the program further behind other children, providers serving these children should be given credit if the children's readiness substantially improves but fails to fully meet state standards.

However, creating a screening system to measure learning gains while in VPK would require providers to administer a pre-test to students when they enter the program. It could be costly to develop and administer an age-appropriate assessment instrument, and such testing would take time away from delivering instructional programs. Such a system could also create an incentive for providers to award low readiness scores to children entering their program so that the children would show strong learning gains.

The department acknowledges that some VPK providers may not have met the minimum readiness rate due to unique circumstances such as serving a majority of children with disabilities. The department is seeking legislation to provide the State Board of Education with the authority

<sup>&</sup>lt;sup>12</sup> Pursuant to <u>s. 1002.67(3)(c)2.</u>, *F.S.*, providers identified as low performing for two consecutive years are required to use a curriculum approved by the department. Providers failing to meet the minimum performance rate for four consecutive periods will be removed from eligibility to deliver VPK program services.

that attended their programs.

to promulgate a rule granting a good cause exemption for providers not meeting the minimum readiness rate for three consecutive years. Criteria for exemptions may also include availability of VPK programs in the vicinity.

# **Recommendations** –

To improve the state's ability to assess the performance of VPK program, we recommend that the Legislature consider amending s. 1002.69(5), *Florida Statutes,* to require that department also report the total percentage of kindergarten students who meet all state readiness standards, and thus are considered fully ready for school. This additional information would assist the Legislature and parents in evaluating the success of the VPK program and identifying performance trends.

To improve the rating of VPK providers, we recommend that the department modify its methodology by revising the provider readiness rating methodology to consider the percentage of a provider's children ready on all three kindergarten readiness measures. This would address the issue of designating providers as low performing who produce a higher percentage of children fully ready for kindergarten than providers identified as satisfactory.

To improve VPK program accountability, the department should annually review the cut off scores that students must meet to be determined ready for kindergarten, particularly for the Early Childhood Observation System assessment. This will help ensure that students who are deemed ready by the assessment are in fact ready for kindergarten in the areas covered by the assessment.

# Agency Response-

In accordance with the provisions of s. 11.51(5), *Florida Statutes*, a draft of our report was submitted to the Department of Education and the Agency for Workforce Innovation for both to review and respond. The Department of Education provided a written response, which is presented in Appendix C.

# Appendix A Methodology Used to Assess the Effect of Florida's Voluntary Prekindergarten Program

To assess Florida's VPK program, we reviewed the process the Department of Education uses to ensure the selection and appropriate administration of the Florida Kindergarten Readiness Screener and the department's reporting of readiness results. In addition, we examined the kindergarten readiness screening results of students who entered public kindergarten in the fall of 2007. We included in our analysis children who attended the program from September 2006 through August 2007 and were subsequently assessed for their readiness for kindergarten. We compared readiness assessment scores of public school kindergarten children who attended the VPK program with those who did not attend the program. In addition we compared the assessment scores of children attending the 2006-07 school year VPK program to those who attended the VPK 2007 summer program. We based our comparison on the program's three measures of kindergarten readiness. These measures examine child development in alphabet recognition, initial sounds recognition, and classroom readiness skills in seven domains (e.g., language and literacy, mathematics, social and personal skills, and physical development and fitness). We used statistical models that controlled for characteristics such as age and disabilities that have the potential to affect the readiness of children.

# Data

The Department of Education provided data on children's demographics, the three kindergarten readiness assessment measures, and the number of hours that the children participated in the VPK program. The Department of Education obtained information on VPK program hours from the Agency for Workforce Innovation and gave VPK providers the opportunity to verify these data.

**Limitations**. Depending on the kindergarten readiness measure, about 20% of children participating in the Florida's prekindergarten program were missing at least one readiness score (see Table A-1). Most of the children attend private kindergarten or do not attend kindergarten.

# Methods of analysis

Using logistic regression, we adjusted for differences in the composition of groups of children we analyzed to factor in the effect of characteristics that are correlated with kindergarten readiness. Our analyses adjusted for differences in age, gender, race/ethnicity, eligibility for free or reduced price lunch, proficiency in speaking English, and physical, mental, emotional, social, and learning disabilities. For all statistical tests, we used a 95% confidence level in determining statistically significant differences.

## Table A-1

A Significant Number of Children Were Excluded Due to Missing Kindergarten Readiness Measures

	School Year VPK Program	Summer VPK Program	Did Not Participate in VPK Program
Number of children in data	112,857 (100%)	10,214 (100%)	89,569 (100%)
Number of children excluded from analyses:			
Missing classroom readiness skills - Early Childhood Observation System score	20,608 (18.3%)	1,752 (17.2%)	11,204 (12.5%)
Missing alphabet recognition - Dynamic Indicators of Basic Early Literacy Skills – Letter Naming Fluency score	20,850 (18.5%)	1,793 (17.6%)	11,297 (12.6%)
Missing initial sound recognition - Dynamic Indicators of Basic Early Literacy Skills– Initial Sound Fluency score	22,511 (19.9%)	1,946 (19.1%)	13,546 (15.1%)
Missing scores for all three measures	19,702 (17.5%)	1,679 (16.4%)	9,731 (10.9%)

Source: OPPAGA analysis of Department of Education 2006-07 kindergarten readiness data.

**Limitations**. Our ability to assess the effectiveness of the VPK program in preparing children for school was limited by two primary factors.

First, children who participated in the VPK program were not assessed prior to entering the program. As a result, our analysis could not determine how much, if any, the children improved while in the program. We thus focused our analysis to comparing the readiness of children who participated in the program to those who did not, and the readiness of children who participated in the summer and school year VPK program.

Second, because children were not randomly assigned, the children who participated in the program may have had greater literacy and child development prior to entering the program than the children of the same age who did not participate in the program. Differences in readiness rates across groups may also be due in part to factors other than participating in the program, including self-selection bias. For example, the children of parents making the effort to enroll their children in VPK may be better prepared for school due to a positive home environment than children who were not enrolled in the program. Our analyses also were limited because we did not have data on the prior experience in other pre-school educational programs for children who did not participate in the VPK program. We attempted to address these concerns by using statistical models that control for social and economic factors associated with literacy skills and child development.

# Statistical results

For the first set of analyses we ran separate logistic regression models for four measures of kindergarten readiness comparing children who participated in the VPK program and those who did not. Results are reported in Table A-2. On all measures, children who participated in VPK were more likely to be ready for school. For example, a likelihood of being ready of 1.83 means VPK children were 1.83 times as likely to be ready on the classroom readiness skills measure as non-VPK children were.

#### Table A-2

#### Children Who Participated in the VPK Program Were More Likely to Be Assessed Ready for School Than Children Who Did Not Participate

	All Screened Children
Kindergarten Readiness Measure	Likelihood of Being Ready – VPK Children vs. Non-VPK Children
Classroom readiness skills - Early Childhood Observation System	1.83 <sup>1</sup>
Alphabet recognition - Dynamic Indicators of Basic Early Literacy Skills – Letter Naming Fluency	1.86 <sup>1</sup>
Initial sound recognition - Dynamic Indicators of Basic Early Literacy Skills – Initial Sound Fluency	1.21 <sup>1</sup>
All three measures	1.38 <sup>1</sup>

<sup>1</sup> Statistically significant at p<0.05

Note: Each regression model included the child's months of age at time of program entry, gender, race/ethnicity, English proficiency, eligibility for free/reduced price lunch, disability status, and statistically significant interaction effects between program participation and the preceding control variables.

Source: OPPAGA analysis of Department of Education 2006-07 kindergarten readiness data.

For the second set of analyses we ran separate logistic regressions for the three measures of kindergarten readiness comparing children who participated in the school year VPK program and the summer program. We also ran the four analyses on a smaller subset of VPK children who were served by a provider that participated in both the school year and summer programs. Results are reported in Table A-3. The results do not provide clear evidence for children in one program doing better than children in the other. For example, a likelihood of being ready of 1.21 means children who participated in the school year program were 1.21 times as likely to be ready on the classroom readiness skills measure as summer program children. However, children in the summer program were more likely to be ready on initial sound recognition. Differences in readiness on all three measures were statistically insignificant.

#### Table A-3

## Children Who Participated in the School Year VPK Program Were More Likely to Be Assessed Ready for School Than Children Who Participated in the Summer Program

	Likelihood of Being Ready – School vs. Summer Program		
Kindergarten Readiness Measure	All Screened VPK Children Ser Both the Summer and VPK Children School Year Programs		
Classroom readiness skills - Early Childhood Observation System	1.21 <sup>1</sup>	1.23 <sup>1</sup>	
Alphabet recognition - Dynamic Indicators of Basic Early Literacy Skills – Letter Naming Fluency	0.96	1.21 <sup>1</sup>	
Initial sound recognition - Dynamic Indicators of Basic Early Literacy Skills – Initial Sound Fluency	0.87 <sup>1</sup>	1.09 <sup>1</sup>	
All three measures	0.97	1.13 <sup>1</sup>	

<sup>1</sup>Statistically significant at p < 0.05.

Note: Each regression model included the child's months of age at time of program entry, gender, race/ethnicity, English proficiency, eligibility for free/reduced price lunch, disability status, and statistically significant interaction effects between program participation and the preceding control variables.

Source: OPPAGA analysis of Department of Education 2006-07 kindergarten readiness data.

# Appendix B

# Performance Levels of VPK and Non-VPK Children on the Florida Kindergarten Readiness Screener

The Department of Education uses the Florida Kindergarten Readiness Screener to assess children's readiness for kindergarten. The Florida Kindergarten Readiness Screener is comprised of subsets of items from two published assessments, the Dynamic Indicators of Basic Early Literacy Skills and the Early Childhood Observation System that together measure classroom readiness in seven developmental domains, alphabet recognition, and initial sound recognition. Table B-1 provides information on the skills screened and performance levels for each of the three instruments that comprise the Florida Kindergarten Readiness Screener.

## Table B-1

The Florida Kindergarten Readiness Screener Measures Children's Alphabet Recognition, Initial Sounds Recognition, and Classroom Readiness in Seven Developmental Domains

Screening Instrument	Description
Alphabet recognition - Dynamic Indicators of Basic Early Literacy Skills – Letter Naming Fluency	<ul> <li>Assesses children's proficiency in naming upper and lower case letters.</li> <li>Students are asked to identify as many letters as possible within one minute. Scores are reported in four performance levels. Children who are above average or low risk are ready for kindergarten.</li> <li>Above average: identified 17 or more letters</li> <li>Low risk: identified 8-16 letters</li> <li>Moderate risk: identified 2-7 letters</li> <li>High risk: identified one letter</li> </ul>
Initial sound recognition - Dynamic Indicators of Basic Early Literacy Skills– Initial Sound Fluency	<ul> <li>Assesses children's ability to recognize beginning sounds in a spoken word. Children are shown 16 pictures and allowed five seconds to provide a response. Scores are reported in four performance levels. Children who are above average or low risk are ready for kindergarten.</li> <li>Above average: 12 or more correct responses</li> <li>Low risk: 8-11 correct responses</li> <li>Moderate risk: 4-7 correct responses</li> <li>High risk: three or fewer correct responses</li> </ul>
Classroom readiness skills- Early Childhood Observation System	<ul> <li>Assesses a child's development in language and literacy, mathematics, social and personal skills, and physical development and fitness. The rating is based on 19 classroom activities, including the ability to listen to stories, follow classroom rules, and put away material in the appropriate place. Scores are reported in three performance levels. Children who consistently demonstrate appropriate skill development or emerging/progressing skill development are ready for kindergarten.</li> <li>Consistently demonstrating: a child demonstrates appropriate skill development.</li> <li>Emerging/progressing: a child demonstrates some of the appropriate skill development.</li> <li>Not yet demonstrating: a child does not demonstrate appropriate skill development.</li> </ul>

Source: Department of Education.

Table B-2 shows that when combining the two highest categories of achievement indicating "full readiness" for kindergarten, as defined by the Department of Education, performance results on the classroom skills assessment are higher (approximately 92) than for alphabet recognition (approximately 81%) and for the sound recognition (approximately 70%). On the assessment of emergent literary skills, over two-thirds of VPK participants demonstrated above average skills in alphabet recognition, the highest single category of achievement for VPK children. All children performed the lowest on recognizing initial sounds of spoken words. Approximately 50% reached the above average level with only 18% scoring at the low risk level. In addition, this measure showed the highest proportion of VPK children identified as high risk (14.2%) of future reading failure.

## Table B-2

VPK Children Were Most Successful at Letter Naming and More Likely to Be Ready Than	
Other Children in the Three Areas Assessed	

Readiness	Performance Level	Percentage Ready VPK Only	Percentage Non-VPK	Difference
Classroom Skills				
Ready	Consistently Demonstrating	56.4%	43.6%	12.8%
neauy	Emerging/Progressing	36.0%	40.5%	-4.5%
Not Ready	Not Yet Demonstrating	7.6%	15.9%	-8.3%
Alphabet Recognition (K	nowledge of Letters)			
Ready	Above Average	68.6%	50.7%	17.9%
neauy	Low Risk	12.3%	13.4%	-1.1%
Not Ready	Moderate Risk	10.2%	15.8%	-5.6%
	High Risk	8.9%	20.1%	-11.2%
Sound Recognition (Initi	al Sound Fluency)			
Ready	Above Average	52.2%	42.6%	9.6%
Ready	Low Risk	18.0%	19.3%	-1.3%
Not Ready	Moderate Risk	15.6%	19.1%	-3.5%
Not Ready	High Risk	14.2%	19.1%	-4.9%

Source: OPPAGA analysis of Department of Education 2006-07 kindergarten readiness data.

# Appendix C

# FLORIDA DEPARTMENT OF EDUCATION



Dr. Eric J. Smith Commissioner of Education

> Just Read, Florida!

STATE BOARD OF EDUCATION

T. WILLARD FAIR, Chairman Memburs DONNA G. CALLAWAY DR. AKSHAY DESAI ROBERTO MARTÍNEZ PHOEBE RAULERSON KATHLEEN SHANAHAN LINDA K. TAYLOR

April 3, 2008

Mr. Gary R. VanLandingham Office of Program Policy Analysis and Government Accountability 111 West Madison Street, Suite 312 Tallahassee, Florida 32399-1475

Dear Mr. VanLandingham:

Attached, please find our response to the draft report, 61% of Voluntary Prekindergarten Children Are Ready for Kindergarten; Accountability Process in Need of Improvement. If you have any questions, please contact Shan Goff, Director, Office of Early Learning at 245-5070 or Ed Jordan, Acting Inspector General, at 245-0403.

Sincerely,

Eric J. Smith Dr.

0

EJS/sgg

Attachment

cc: Monesia Brown Frances Haithcock Jay Pfeiffer

#### Florida Department of Education

#### Agency Response to OPPAGA DRAFT Report: 61% of Voluntary Prekindergarten Children Are Ready for Kindergarten; Accountability Process in Need of Improvement

#### Findings:

The department should report additional information on program effectiveness.

The State Board of Education Rule (Rule 6A-1.099821, FAC) that describes the Department's methodology for calculating the VPK Provider Kindergarten Readiness Rate is promulgated annually following policy discussions by the State Board of Education and extensive public input. In response to the public input received for the 2006-07 Readiness Rate calculation, the Department revised the VPK Providers' Readiness Rate Report (available for all VPK providers at <a href="https://vpk.fldoe.org">https://vpk.fldoe.org</a>) to include the percent of children included in the Readiness Rate. We will include OPPAGA's recommendation to also report the number/percent of VPK children who are "ready for kindergarten" across all three kindergarten screening measures as part of our policy discussions for the 2007-08 Readiness Rates.

The process the department uses to identify low performing providers has shortcomings.

The current model used to calculate the readiness rate is a compensatory model, patterned after school grades. It gives providers "credit" for higher scores on ECHOS which may "balance out" the expected lower performance on the DIBELS. As indicated in the report, each kindergarten screening measure captures a different aspect of a child's development toward kindergarten readiness. The ECHOS is a "whole child-oriented measure" based on national standards in seven domains. The skills assessed by ECHOS are those one would expect to see in a typically developing child in most preschool settings. The two DIBELS probes measure very discrete skills associated with emergent literacy which require a much higher level of direct and intentional teaching by the VPK instructor.

Given the above, the majority of kindergarten children and VPK providers do score higher on the ECHOS than on either of the two DIBELS measures. This scoring trend was also present in 2004-05 and 2005-06 when the Early Screening Inventory (ESI-K) was administered along with the two DIBELS measures. A VPK provider's scores on these three measures do provide information to identify areas for improvement. For example, if a VPK provider scored low on the ECHOS and did not have any extenuating circumstances, such as the majority of their children were identified as children with significant disabilities, the "treatment" for improvement should include a review of the basic components of a quality child care program. Lower scores on DIBELS typically indicate that the VPK instructor needs more professional development in the area of concepts of print and phonological awareness, which is where the Department continues to focus its training.

As shared with OPPAGA staff, the State Board of Education, at their February 2008 meeting, specifically asked for the Department to provide additional options for calculating the Readiness Rate within the current statutory boundaries (i.e., minimum rate is set so that no more than 15 percent of the VPK providers are identified as not meeting the minimum readiness rate). The Department will be reviewing options, such as revising the definition of "ready for kindergarten" to include only the level of "Consistently Demonstrating" on the ECHOS instead of the current

use of "Consistently Demonstrating" and "Emerging/Progressing," for consideration by the State Board.

 Almost one-half of all unrated VPK providers in 2006-07 were excluded from the rating because the children they served were not screened on at least one measure.

As indicated in the report, Rule 6A-1.099821, FAC, requires that a VPK provider serve at least four children who are enrolled for 70% or more of the total number of instructional hours and participated in each of the three screening measures. The cell size of four was determined to be appropriate given that the VPK providers must enroll at least four children in order to be an eligible VPK provider (section 1002.55(1)(e), F.S.).

It should be noted that a higher percentage of VPK providers (90% or 4,595) received a readiness rate for 2006-07 than for 2005-06 (83% or 3,772). The Department attributes this to the increase in private school children participating in the kindergarten screening, increase of VPK providers participating in the data verification process, and refinement of matching rules for the Agency for Workforce Innovation (AWI) VPK data and the Department's kindergarten screening data. As also indicated in the report, although the percentage of records matched remained at 83%, the number of VPK providers increased from 2005-06 to 2006-07 by 12% or 551 providers. The Department continues to work with AWI, VPK providers, coalitions and school districts to increase the number of private school children participating in the kindergarten screening and to improve the percentage of records matched.

To gather additional information about VPK providers without rates, the Department reviewed the status of VPK providers who did not receive a readiness rate in 2005-06. Of the 255 VPK providers who did not receive a rate in 2005-06 due to having fewer than four children screened, 77 or 30% were not VPK providers in 2006-07 and 178 or 70% have a 2006-07 readiness rate. Additionally, only 41 VPK providers did not receive a readiness rate in either year due to not having four children screened. The Department will work with AWI and the respective coalitions and school districts to review details related to these 41 VPK providers.

 Providers serving high numbers of at-risk and minority children are more likely to lose eligibility to provide VPK services.

The Department agrees that there may be unintended consequences for some VPK providers with unique circumstances. Therefore, as indicated in the report, the Department is seeking legislative authority to establish a "good cause exemption" from not meeting the minimum readiness rate for three consecutive years.

As demonstrated by the much earlier 2006-07 release of the readiness rates, the Department and AWI are committed to continuing to improve the timeliness of the release of the readiness rates. The delay between the Fall 2006 screening and the release of final 2005-06 readiness rates was also due to the receipt of the AWI VPK data in February 2007 rather than solely due to the Department's "analytical processes" as stated in the report. Again, both agencies are reviewing their respective data processes to continue to improve the timeliness of the release of the readiness rates. Report No. 08-23

# The Florida Legislature

# *Office of Program Policy Analysis and Government Accountability*



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