

Description and Analysis of the Florida Kindergarten Readiness Screener (FLKRS)  
And the Kindergarten Readiness Rate:

Accountability Measures for the Voluntary Prekindergarten Program in the State of Florida

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## 1.0 INTRODUCTION AND BACKGROUND

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The wonders of child development and the long-term consequences of the experiences of young children have made young children and school readiness a key policy focus, one that attracts the attention of policymakers, parents, teachers, and researchers. Extensive research on early childhood education programs shows short- and long-term outcomes of these programs if they are of high quality, including higher test scores, improved language development, fewer behavior problems, higher rates of graduation, reduced involvement in crime, and lower receipt of welfare. As a result, the early childhood field is focusing on developing systems that lead to the best outcomes for children. Policy makers and the public want to know if children are learning, and if public funds are being used wisely.

In 2004, the Florida Legislature enacted legislation to implement the Voluntary Prekindergarten Education Program (VPK) in accordance with the State Constitution. Because the legislation required assessment to determine the effectiveness of the VPK program in preparing children for school (school readiness) be assessed, the State Department of Education (DOE) created the Florida Kindergarten Readiness Screener (FLKRS) and the Kindergarten Readiness Rate to meet this mandate.

## 2.0: DESCRIPTION OF THE FLORIDA KINDERGARTEN READINESS SCREENER (FLKRS)

The FLKRS consists of: two of the nine-probes from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), the Letter Naming Fluency (LNF) probe and the Initial Sound Fluency (ISF) probe, and 19 items selected from the Early Childhood Observation System (ECHOS). The FLKRS is administered and scored by the kindergarten teacher upon entry into kindergarten.

The Letter Naming Fluency (LNF) from the DIBELS consists of a page of random upper- and lowercase letters. The child names as many letters as possible in 1 minute. The card presented to the child is on page 4..

For Initial Sound Fluency (ISF), the examiner reads four sets of four words (for a total of 16 items) and asks which word begins with a particular sound. The child points to pictures representing the words to indicate the correct answers. The card presented to the child is on page 4. Scores for both the LNF and the ISF are reported as number of correct responses per minute.

The ECHOS is an observation system. Nineteen items were selected from the ECHOS to be included in the FLKRS. The kindergarten teacher observes the child in his natural environment on these skills and rates the child's skill development. The 19 subset of ECHOS items are aligned with the following child development domains:

- Approaches to Learning – 1
- Social and Emotional – 2
- Language and Communication – 1
- Emergent Literacy – 4
- Cognitive Development and General Knowledge – 9
- Motor Development - 2

## Overview of DIBELS Measures

### Letter Naming Fluency

- Intended for students in kindergarten through the fall of first grade
- Provides a measure of a student's proficiency in naming upper and lower case letters
- Primarily an indicator of risk
- Students identified at risk should be instructed in phonological awareness and alphabetic principle

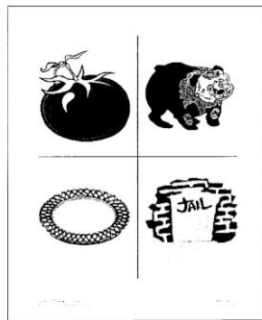
Probe 1

c	c	N	u	Q	M	u	h	S	i
n	b	e	N	F	f	o	a	K	k
g	p	k	p	a	H	C	e	G	D
b	w	F	i	h	O	x	j	I	K
x	t	Y	q	L	d	f	T	g	v
T	V	Q	o	w	P	J	t	B	X
Z	v	U	P	R	I	V	C	I	W
R	J	m	O	z	D	G	y	U	Y
Z	y	A	m	X	z	H	S	M	E
q	n	j	s	W	r	d	s	B	I
r	A	E	L	c	e	N	u	Q	M

Total: \_\_\_/110



### Sample Probe



This is tomato, bear, a plate, and jail.

Which picture begins with /t/?

What sound does "bear" begin with?

The two one-minute probes from the DIBELS and the 19 items selected from the ECHOS are assumed to be a valid and reliable measure of school readiness. The question is, is it?

### 3.0 EVALUATION OF THE FLKRS AS A MEASURE OF SCHOOL READINESS

Assessments used for high stakes decisions must be valid and reliable, and be well-suited for their intended purpose, which in this case is determining the school readiness of each child participating in the VPK Program. This paper examines the validity and reliability of the FLKRS as a measure of school readiness. It also examines the Prekindergarten Readiness Rate and the use of this information to evaluate the effectiveness of the VPK Program in preparing children for school.

#### *Technical Adequacy of the FLKRS*

Technical adequacy of a test is established over a period of time, and concerns matters of validity and reliability. Validity asks the question, does the test measure what it purports to measure? Validity is the most important characteristic a test or measuring instrument can possess. It is concerned with the appropriateness of the interpretation made from test scores. A test is valid for a particular interpretation for a particular group. An assumption is made in Florida that the FLKRS is a valid measure of school readiness for **all** children, and that programs which do not meet the Readiness Rate cutoff score are inferior, and in need of reform. Are these assumptions justified? Consider the following:

- Does the FLKRS adequately assess all areas of development thought to be related to school success? Does it assess the full range of goals for young children?

Two-thirds of the readiness rate depends upon the child's performance on the two one-minute DIBELS probes. **Important developmental domains, such as social and emotional development, known to be related to success in school and in life are overlooked and/or underrepresented.** This is called construct underrepresentation.

- Is the alignment between the FLKRS and the VPK Early Learning Standards for children adequate?

**Compared to the Florida VPK Early Learning Standards, the FLKRS covers a narrow range of indicators of readiness.** In fact, two-thirds of the readiness rate is determined by two early literacy items.

- Does the test predict how well children will do in the future in school when other variables such as socioeconomic status are controlled?

**Studies on the predictive validity of the FLKRS have not been done.** In fact, the ability of any test to predict later academic or school success is restricted. Young children demonstrate developmental progress in many different domains and in many different ways, making it difficult to design a suitable early childhood assessment tool with good predictive validity.

- Are assessors well-trained and able to establish rapport with the children when they are testing and their families? Are there safeguards to ensure that the data are not biased because the teachers are invested in the results (that is, want children in their class to do well or poorly)?

**The consistency, credibility, and integrity of child assessment administration, observation, and scoring has not been established and is not monitored.** Reports of inconsistency and unintended bias in administering and scoring the FLKRS abound.

- Are the results of the assessment relatively stable for an individual child regardless of variables such as where the test is given, who is the examiner, or how the child is doing that day?

**The stability of the measure has not been established.**

- Are young children developmentally ready to meet the test demands, and give undivided attention to the tasks at hand?

Young children are not accustomed to test demands, and attention to task is easily diverted. **Timed tests are not developmentally appropriate and generally do not yield information that is valid and reliable enough to use in high stakes decisions.**

- Are the unique developmental characteristics of children from diverse cultures and children with special needs respected?

The FLKRS does not have psychometric properties with adequate documentation regarding appropriateness for use with diverse populations of young children. **Appropriate accommodations to fully document the progress of English Language Learners and children with disabilities have not been made.**

Assessment tools used for high stakes decisions must meet rigorous standards of technical accuracy. The FLKRS does not have adequate validity and reliability to be used as a measure of school readiness, particularly when high stakes are involved. Despite this, the FLKRS is used in Florida to develop the VPK Provider Kindergarten Readiness Rate which in turn is used to determine the effectiveness of the VPK Program in the State of Florida and to establish program accountability.

#### 4.0 THE VPK PROVIDER KINDERGARTEN READINESS RATE

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The State Board of Education, as required by law, developed a process to calculate a kindergarten readiness rate every year for each private or public school VPK provider. The VPK Provider Kindergarten Readiness Rate is based on the FLKRS scores of children who attended VPK and who are screened upon entry into kindergarten. The screening is administered by the district public schools for all public school kindergarten students. Some private schools also participate in the assessment. Readiness for kindergarten is calculated as described below.

##### *Formula to Calculate the VPK Provider Kindergarten Readiness Rate in Florida*

The percent of children ready for kindergarten on each of the three measures is calculated by dividing the number of children who score at or above the levels for readiness on each measure by the number of children screened on each measure. For example, if out of a total of 22 children served by a VPK provider, 22 are screened by the ECHOs and 22 scored “ready”, 22 divided by 22 equals 100 percent. If 20 children are screened on DIBELS LNF and 15 are “ready”, 15 divided by 20 equals 75 percent, and if 20 are screened on DIBELS ISF and 12 are “ready”, 12 divided by 20 equals 60 percent. The sum of the percent of children ready for kindergarten is the readiness rate. The sum of the percent of children ready (100 + 75 + 60) equals a readiness rate of 235.

##### *The Consequences of the VPK Provider Kindergarten Readiness Rate in Florida: High Stakes Testing*

VPK Providers with readiness rates below 210 are designated as “Low Performing Providers.” Low Performing Providers must develop, submit, and implement improvement plans. Progress reports must be submitted on a quarterly basis, and a provider who falls in this category for three years is terminated from the program. Low Performing Providers are posted online and published in the newspaper. The State DOE states, “the VPK Readiness Rate measures how well a VPK provider prepares four-year-olds to be ready for kindergarten based upon Florida VPK Standards.” This is a strong cause and effect statement that is not justified.

##### *The VPK Provider Kindergarten Readiness Rate as a Measure of Program Effectiveness*

The FLKRS does not have adequate technical adequacy, as developed and administered, to be used as a measure of school readiness. This point is addressed above.

In addition, there are other explanations for a child’s performance on the FLKRS such as socioeconomic status, family factors, health factors, etc. These factors have not been considered in interpreting test results and calculating readiness rates. To quote from W. Steven Barnett, Director of the National Institute for Early Education Research at Rutgers University, “To attribute the source of kids’ gains to a program, as opposed to kids’ families and communities – people are skeptical of that.”

Measuring at a single point in time limits the interpretations that can be made from the test results. The critical determinant of a program’s success should be change over time (what the

child knows and is able to do after involvement with the program) and not according to status (where the program ranks in relation to other programs).

Finally, not enough information is gathered to adequately evaluate the effectiveness of the VPK Program. Best practices in program evaluation and accountability call for information to be gathered at multiple points in time, in multiple contexts, and from multiple sources including parents.

In summary, state-of-the-art program evaluation methodology, data analysis, and reporting are needed to increase the value and credibility of the VPK program evaluation.

## 5.0 UNINTENDED COSEQUENCES OF HIGH STAKE TESTING

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Poorly conceived accountability initiatives can generate misleading feedback, impose onerous burdens, and lead to misguided decisions. In Florida, there are concerns about the risks or unintended negative consequences as local programs and staff respond to new accountability mechanisms. These risks fall into two broad categories.

1. **Teachers are strongly influenced to alter their teaching and curriculum to conform to what is tested. The result is a narrowing of the curriculum and movement from best practices in early childhood education to didactic and drilling methods of teaching early literacy and other academic skills.** This is in direct contradiction to research in early childhood education that indicates that academic achievement cannot be attained without good social and emotional skills as the foundation. It also contradicts other research that indicates that later school success is enhanced by active, child-initiated early learning experiences and impeded by the introduction of formalized learning experiences too early for most children's developmental status.
2. Under the current assessment system, a VPK program that brings a child along on each of the developmental domains gets no credit for doing so. Likewise, a program that serves affluent children already at or above developmental level gets the credit for success. This raises issues of capacity and fairness; concern about which children have access to early education and the equity of distribution of services. **Programs may be tempted to select children with the most potential to succeed. Likewise, programs serving children most in need may withdraw from the program or be forced to close. This compounds the effects of access to quality programs by children most in need of those programs. This system of accountability is likely to result in limited access to VPK by the most needy children and maintaining the status quo for less needy children who would already have access to early education.**

## 6.0 CONCLUSION

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The National Early Childhood Accountability Task Force, The National Education Goals Panel and The National Council on Measurement in Education all recommend that “no child assessments be conducted for high stakes accountability purposes until third grade, and preferably fourth-grade”. These groups cite the unreliability of testing at this age and the restricted ability of these tests to predict later academic achievement or success in school. Young children demonstrate developmental progress in many different domains and in many different ways, making it difficult to design suitable early childhood assessment tools. The Harvard Education Letter goes on to say, “you can’t use one assessment – even a good one – to say whether a program is good or not.”

The State of Florida should explore other ways to demonstrate accountability. In the meantime, caution should be exercised when drawing conclusions about the effectiveness of the State of Florida VPK Program and the effectiveness of individual providers of voluntary prekindergarten services. Our single measure (the FLKRS) lacks technical adequacy; children this age do not test reliably or validly; the FLKRS is given at a single point in time; and no experimental studies with random assignment of children to experimental and control groups have been done. Cause and effect conclusions are just not justified for all the reasons cited above.

Parents, teachers, and policymakers all want more information as they make decisions on how to foster children’s early learning and development. Programs and communities should be held accountable. The question is how to do this without generating misleading feedback, imposing onerous burdens, and making misguided decisions. Another paper will provide some guidelines for designing good accountability systems.

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