

# Education Committee Thursday, November 3, 2011 10:30 a.m. - 12:30 p.m. Reed Hall - 102 HOB 

Meeting Packet



## AGENDA

> Education Committee
> November 3, 2011
> 10:30 a.m. - 12:30 p.m.
> Reed Hall - 102 HOB

## I. Call to Order/Roll Call

II. Opening Remarks
III. Update on the implementation of CS/CS/SB 736 by Kathy Hebda, Deputy Chancellor for Educator Quality
IV. School Grades Overview by Kris Ellington, Deputy Commissioner Division of Accountability, Research and Measurement
V. Student Acceleration Overview by Matthew Bouck, Director Office of Articulation
VI. Discussion of Higher Education by Chancellor Will Holcombe
VII. Closing Remarks and Adjournment

CS/CS/SB 736

## Implementation of 736

- Overview of Value-Added Calculation
- Distinction between learning growth as measured by (1) the value-added model and
(2) achievement level and learning gains as measured by School Grades
- Process for permitting instructional personnel to review the class roster and correct any mistakes
- Update on status of school district plans and implementation efforts


## The Measure: Value-Added Analysis

- With the performance of students representing $50 \%$ of a teacher's evaluation, the development of a fair and transparent measure of student growth was essential
- A value-added model measures the impact of a teacher on student learning, by accounting for other factors that may impact the learning process.
- These models do not:
- Evaluate teachers based on a single year of student performance (status model) or
- Evaluate teachers based on simple comparison of growth from one year to the next (simple growth)


## Value-Added Example



## Advantages of Value-Added Models

- Teachers teach classes of students who enter with different levels of performance and possibly different student characteristics
- Value-added models "level the playing field" by accounting for differences in the performance and characteristics of students assigned to teachers
- Value-added models are designed to mitigate the influence of differences among the entering classes so that schools and teachers do not have advantages or disadvantages simply as a result of the students who attend a school or are assigned to a class


## The Florida value-added model

- Implemented for reading and math in grades 4 through 10, using FCAT data
- Other models for other tested subjects are forthcoming (e.g., Algebra I End-of-Course exam (EOC) and other statewide EOCs)
- FCAT Model uses student-level prior test scores and other measured characteristics to predict student growth; with the intent of identifying the teacher's contribution to learning


## Factors included in the Florida FCAT ValueAdded Model to "Level the Playing Field"

Student Characteristics:

- Up to two prior years of achievement scores (the strongest predictor of student growth)
- The number of subject-relevant courses in which the student is enrolled
- Students with Disabilities (SWD) status
- English Language Learner (ELL) status
- Attendance
- Gifted status
- Mobility (number of transitions)
- Difference from modal age in grade (as an indicator of retention)


## Factors included in the Florida FCAT ValueAdded Model to "Level the Playing Field"

Classroom Characteristics:

- Class size
- Homogeneity of students' entering test scores in the class

School Characteristics:

- The model recognizes that there is a factor related to the school independent from the teacher's contribution - that impacts student learning, called a "school component"
- Statistically, the school component is simply calculated using the factors already controlled for in the model measured at the school level by grade and subject
- May represent the impact of the school's leadership, the culture of the school, or the environment of the school on student learning, and contributions of teachers in the school
- Functions as another covariate, just like all other factors


## What does a teacher's value-added score represent?

- An estimate of a teacher's impact on student learning, after accounting for other factors that may impact learning.
- A score of " 0 " indicates that students performed no better or worse than expected based on the factors in the model
- A positive score indicates that students performed better than expected
- A negative score indicates that students performed worse than expected


## The Use of the Value-Added Scores

- Scores may need to be aggregated
- Models are run by grade level, subject, and year
- Aggregation allows those scores to be combined into one measure for use in an evaluation
- Aggregation across years, also decreases the standard error (variability) in the measure; improving the accuracy of the score
- Scores then need to be classified into performance categories (highly effective, effective, needs improvement/developing, and unsatisfactory)
- Districts needed to decide on how to aggregate teacher value-added scores and classify teacher value-added scores for use in evaluations this school year
- Options were provided


## Aggregation and Classification Options

- Three different options for aggregating and classifying the teacher scores were provided to districts:
- Option 1: Transform the scores into a common metric (e.g., a proportion of a year's average growth), combine, and then classify
- Note: Transformed and combined scores were provided to districts
- Option 2: Classify score for a teacher (grade/subject/year) into a performance category and then aggregate the classifications to create a single measure
- Option 3: Compute percentage of students in a teacher's class who did better than statistically predicted and then classify based on that percentage


## Aggregation and Classification Options

- Option 1 Description: Value-added scores (which represent the number of scale points, on average, students performed above/below expected) are transformed into a proportion of a year's average growth. Those transformed scores are averaged together to produce one measure, expressing the proportion above or below average a teacher's students grew. Teachers are classified into 4 categories based on those proportions.
- Option 2 Description: A teacher teaches multiple grade levels and subjects across multiple years. Those scores are independently classified on a scale of 1 to 4 , and then those classifications are averaged into one value (analogous to a GPA). The overall score is then classified into one of the 4 categories.
- Option 3 Description: Whether or not the teacher's students met or outperformed expectations is used to classify teachers, as measured by the quantity (the percentage) of students that met or exceeded expectations. How far students moved (or regressed) is not taken into account.


## The Standard Error of the Teacher's Value-Added Score

- An estimate of a teacher's impact on student learning contains some variability
- The standard error is a statistical term that describes the variability
- Standard errors can be used to construct confidence intervals around the teacher's valueadded score
- These confidence intervals can be used when classifying teachers into performance categories


## Use of the Standard Error in Classification of Teachers

- Using the standard error can assist in increasing the accuracy of classification decisions
- Applying this concept, "cut points" can be established based on the teacher's value-added score to determine dividing lines between the 4 performance categories
- Then some degree of the standard error can be applied to the teacher's score to determine with some or a high degree of statistical certainty that a teacher's score falls in one of the 4 categories
- The aim is to use the most accurate method possible to identify a teacher's contribution to student learning; using the standard error in classification decisions helps in that effort


## Use of the Standard Error in

 Classification of Teachers- For example, a teacher's value-added score may be 0.50 , with a standard error 0.10
- A confidence interval using the standard error can be constructed, indicating that given a different set of circumstances (different class, different year), one would reasonably conclude that the teacher's score would fall between 0.40 and 0.60 (i.e., the score +/- 1 standard error)
- Taking this variability into account can assist with classification accuracy when placing teachers in different performance categories


## Differences between Value-Added Measure and School Grades

Value-Added Model

- Measure designed for use in teacher evaluations to identify the teacher's contribution to student learning
- Measure solely based on student growth

School Grades

- Measure designed to evaluate the overall performance of schools
- Composite measure based on a combination of Status Scores
(\% scoring Level 3+) and Student Growth (Learning Gains); additional measures in high school


## Differences between Value-Added Measure and School Grades

Value-Added Model

- Establishes a growth expectation for each student, based on the factors accounted for in the model

School Grades

- Defines a learning gain three different ways:
- Improve achievement levels
- Maintain a level 3,4, or 5
- Improve a specific number of developmental scale score points if the student remains in Levels 1 and 2
- Score represents the degree to which, on average, a teacher's students met or missed those expectations
- The expectation is based on how similar students (in terms of the factors accounted for in the model) performed across the state


## Verifying the Accuracy of Rosters

- The law (s. 1012.34(8), F.S.) requires the State Board of Education to adopt rules which establish a process to permit instructional personnel to review the class roster for accuracy and to correct any mistakes relating to the identity of students for whom the individual is responsible
- Florida is one of five states participating in a Bill and Melinda Gates Foundation grant to develop a tool for roster verification (TeacherStudent Data Link Project)
- Florida is working with a small group of districts (Hillsborough, Escambia, and the North East Florida Educational Consortium (NEFEC)) to pilot this process with the Fall data collection (Survey 2)
- Developing a web based process whereby schools and teachers will have access to view rosters, based on data collected from school districts, and verify their accuracy
- The process will be open to all districts with the Spring data collection (Survey 3)


## Status of District Evaluation Plans

- 64 of 65 Race to the Top Participating LEAs submitted evaluation plans
- 26 are fully approved
- 37 are continuing to clarify their documentation or have scheduled a local meeting to approve final changes
- Non-participating RTTT plans are due December 1
- Next technical assistance is on Learning Targets as a measure of Performance of Students
- Rule workshops for Revisions to Rule 6B-4.010 (new rule number will be 6A-5.030) to be held in December on proposed rule for submission, approval and monitoring of district personnel evaluation systems


## Florida's School Grading System Overview and Updates



Kris Ellington, Florida Department of Education
Deputy Commissioner for Accountability, Research and Measurement November 3, 2011

## Florida's School Grading System

## Purpose and Aims

- Making school performance clear to the public
- Universally understood metric (A-F)
- Performance is based upon student outcomes System of rewards and supports
- Primary and lasting goals: raising student achievement and success, providing more opportunities to students, and opening doors
- Increase rigor to prepare for Common Core assessments in 2014-15


# Update on Opportunity Scholarship Program (OSP) School Selection 

Opportunity Scholarship Program
Recent legislation

- Provides that for purposes of eligibility for the Opportunity Scholarship Program (OSP) a school's grade for OSP selection will be based on statewide assessments pursuant to s.1008.22 F.S. alone
- FCAT, FCAT 2.0, and end-of-course assessments
- This is consistent with past practices


## Update on Differentiated Accountability

## (DA) School Selection

Differentiated Accountability

## Recent legislation

- Provides that the statewide assessments' portion of a school grade be used in determining the appropriate DA performance category, and revises category criteria.
- Possible changes coming for Florida's DA system.


## Overview of School Grading:

## Assessment Components

(Comprising 100\% of Elementary and Middle School Grades, and 50\% of High School Grades)


## School Grading Assessment Measures

## Eight Components

1. Percent at Level 3 or higher in FCAT Reading. 100 points max.
2. Percent at Level 3 or higher in FCAT Mathematics. 100 points max.
3. Percent at Level 3 or higher in FCAT Science. 100 points max.
4. Percent scoring 4 or higher in FCAT Writing. 100 points max.
5. Percent making learning gains in reading. 100 points max.
6. Percent making learning gains in math. 100 points max.
7. Percent of Low $25 \%$ making learning gains in reading. 100 points max.
8. Percent of Low $25 \%$ making learning gains in math. 100 points max.

800 Total Points possible.
High schools receive10 bonus points if at least $50 \%$ of students retaking the grade 10 FCAT in reading and mathematics pass graduation requirements.

HS Components Outside State Assessments
= 50\% of High School Grade (800 points)

| GRADUATION | ACCELERATION | READINESS | GROWTH/DECLINE |
| :---: | :---: | :---: | :---: |
| Overall Rate 200 | Participation <br> 200 (in 2009-10) <br> 175 (in 2010-11) <br> 150 (in 2011-12) | Performance on Reading 100 | For each component, schools earn up to $\mathbf{2 0}$ points for GROWTH* |
| At-Risk Rate 100 <br> Requirement for "A" schools = $75 \%$ or annual improvement. | Performance $\begin{aligned} & 100 \text { (in 2009-10) } \\ & 125 \text { (in 2010-11) } \\ & 150 \text { (in 2011-12) } \end{aligned}$ | Performance on Mathematics 100 | For each component, schools lose 5 points for DECLINE* |
| Total Graduation Points $300$ | Total Acceleration Points 300 | Total Readiness Points 200 | Total HIGH SCHOOL Points Possible (Non-Assessment Measures) 800 |

## Graduation Rate

For 2009-10 and 2010-11, Florida is using the National Governors' Association four-year graduation rate.

Which students are included in the cohort (denominator)?
Entering 9 ${ }^{\text {th }}$ graders in Year 1 of the 4 -year cohort plus incoming transfers, minus exiting transfers and deceased students

Who counts as a graduate?
Standard diploma recipients and special diploma recipients

Who counts as a non-graduate?
Students in the adjusted cohort who did not receive a standard diploma or special diploma (i.e., dropouts, certificate of completion recipients, GED diploma recipients, other nongraduates)

## Graduation Rate for At-Risk Students

- Calculated the same as the overall graduation rate.
- Students are "at-risk" if they scored Level 1 or 2 on Grade 8 FCAT Reading and Mathematics.
- If a school does not have at least 10 students in the atrisk subgroup, the school's overall graduation rate will be substituted for this measure.
- Administered every other year in reading and mathematics
- Other subject areas tested less frequently
- No district*, school, or student results are reported
- "Proficient" on NAEP is not defined as "on grade level" performance
*Exceptions: Hillsborough and Dade who are part of trial urban district program


## School Grades: Successes

- Extra emphasis on the lowest performing students ensures that students are not left out of Florida's work to improve achievement
- NAEP outcomes show improvement over the last decade in grades 4 and 8
- FCAT results have shown continuous improvement


## Florida NGA Graduation Rates

## Reducing the Achievement Gap for African American and Hispanic Students



During the past five years, graduation rate gaps for African Americans and Hispanics have been reduced by $5 \%$ for each group.

## School Grades: Challenges

- NAEP performance plateau in 2011
- NAEP proficiency and students below proficiency
- Performance of schools graded "C" or higher


## Florida NAEP Performance Flattens

## Out in 2011

- Grade 4 Math mean scale score 278 (down 1 from 2009)
- Grade 4 Reading mean scale score 220 (same as 2009)
- Grade 8 Math mean scale score 240 (up 1 from 2009)
- Grade 8 Reading mean scale score 262 (down 2 from 2009)


## Percent of $12^{\text {th }}$ Grade Students Proficient on NAEP Reading and Math, 2009



■ Florida \% Proficient

- Nation, \% Proficient

■ Florida \% Below Proficient

- Nation, \% Below Proficient


## Florida $4^{\text {th }}$ and $8^{\text {th }}$ Grade Proficiency on NAEP Reading and Math, 2009



## Reading Outcomes for Schools Graded "A" in 2010

|  | "A" Schools with at <br> Least 50\% of Students <br> at Level 3 and Up in <br> Reading |  | "A" Schools with <br> Less than 50\% of <br> Students at Level 3 in <br> Reading |  |
| :--- | :---: | :---: | :---: | :---: |
| Type | Number | Percent | Number | Percent |
| Elementary | 950 | $100 \%$ | 0 | $0 \%$ |
| Middle | 352 | $100 \%$ | 0 | $0 \%$ |
| High* | 98 | $81 \%$ | 23 | $19 \%$ |

[^0]
## Reading Outcomes for Schools Graded "B" in 2010

|  | "B" Schools with at <br> Least 50\% of Students <br> at Level 3 and Up in <br> Reading |  | "B" Schools with Less <br> School <br> Type | Number <br> at Level 3 in Reading |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Percent | Number | Percent |  |  |
| Elementary | 362 | $100 \%$ | 1 | $0 \%$ |  |
| Middle | 95 | $99 \%$ | 1 | $1 \%$ |  |
| High* | 81 | $50 \%$ | 81 | $50 \%$ |  |

[^1]
## Reading Outcomes for Schools Graded "C" in 2010

|  | "C" Schools with at <br> Least 50\% of Students <br> at Level 3 and Up in <br> Reading |  | "C" Schools with Less <br> Schan 50\% of Students <br> at Level 3 in Reading |  |
| :--- | :---: | :--- | :---: | :---: |
| Type | Number | Percent | Number | Percent |
| Elementary | 338 | $93 \%$ | 25 | $7 \%$ |
| Middle | 64 | $65 \%$ | 35 | $35 \%$ |
| High* | 1 | $2 \%$ | 60 | $98 \%$ |

[^2]
## Changes Coming for School Grades

- FCAT 2.0 cut scores: increased rigor of test and achievement expectations
- Moving toward new assessments of reading and mathematics in 2014-15: PARCC
- Adding new measures to the middle school grades (HS EOCs and Industry Certifications)
- Assimilating EOCs into the school grades model as they are implemented
- Additional weighting for reading achievement


## Multi-year School Grades System

- Transition to new tests occurring over the next 4 years
- Designing the system now to accommodate the changes
- Develop a multi-year model to:
- Implement statutory changes
- Include new tests as they are available
- Review and set school grading scale


## Differentiated Accountability

- Planned Improvements (pending U.S. Dept. of Education approval)
- School grade becomes sole measure for classifying schools.
- All schools graded "C" or lower will be in DA.
- "Prevent" schools = C graded
- "Correct" (Focus) schools = D graded
- "Intervene" (Priority) schools = F graded
- To exit "Intervene", schools must
- Improve to a "C"
- Improve reading and math performance to levels set by State Board

STUDENT
ACCELERATION
OVERVIEW

## Acceleration Mechanisms

## Matthew Bouck

Director
Office of Articulation
Florida Department of Education

## High School and College Credit

Articulated acceleration programs available to secondary students for high school and college credit

Advanced Placement (AP)
International Baccalaureate (IB)
Advanced International Certificate of Education (AICE)

Dual Enrollment

## Acceleration Participation

|  | 2009-2010 Participation | 2009-2010 Enrollment |
| :---: | :---: | :---: |
| Advanced Placement | 33 high school courses and examinations in 61 districts, lab schools, and FLVS | 171,238 |
| International Baccalaureate | 103 schools (53\% diploma program) | 10,675 |
| Advanced International Certificate of Education | 26 schools | 3,669 |
| Dual Enrollment | 28 Florida Colleges (95\%), 10 state universities (4\%), and 3 private institutions (.03\%) | 32,634 |

Source: Education Information and Accountability Services, DOE

## Benefits of Acceleration Mechanisms

Rigorous high school curriculum
Students exempt from any course or exam fees for AP, IB, AICE, and dual enrollment

College credit for passing scores on exams (up to 45 total hours)
Guaranteed transfer of college credit under the Statewide Course Numbering System

Inclusion of acceleration mechanisms in high school grading system: participation and performance in AP, IB, AICE, and dual enrollment

## Benefits of Acceleration Mechanisms

AP Students in College: An Analysis of Five-Year Academic Careers (College Board, 2007)
AP students perform well on subsequent courses, and more graduate in four/five years compared to non-AP

OPPAGA Report 09-30: University Students Benefit from Acceleration Courses, But Often Retake Math and Science Courses
Students with acceleration credit accumulate fewer credit hours at state universities

A Review of the Florida College Dual Enrollment Program (Florida College System, 2010)
Dual enrollment students perform better in introductory courses than nondual enrollment; dual enrollment students perform well after transferring to a state university

## Advanced Placement - Class of 2010

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| Florida <br> Most Popular Exams | Florida <br> Total Exams | Florida \% <br> Scoring 3+ | National \% <br> Scoring 3+ |
| :--- | :---: | :---: | :---: |
| English Language and Composition | 27,187 | 49.1 | 58.0 |
| English Literature and Composition | 25,076 | 45.0 | 54.7 |
| U.S. History | 22,721 | 33.4 | 50.0 |
| Psychology | 19,588 | 53.0 | 66.3 |
| U.S. Government and Politics | 17,639 | 30.7 | 50.2 |
| World History | 14,779 | 32.0 | 47.9 |
| Calculus AB | 10,936 | 46.1 | 54.4 |
| Human Geography | 10,617 | 36.3 | 50.9 |
| Macroeconomics | 10,075 | 30.2 | 52.1 |
| Environmental Science | 10,042 | 36.5 | 49.3 |

Source: 2011 AP Report to the Nation

## Most Popular Dual Enrollment Courses

2009-2010 Duplicated Enrollments (Fall) - 40\% of Total Dual Enrollments

| ENC 1101 | COMPOSITION I | $14 \%$ |
| :--- | :--- | :--- |
| MAC 1105 | COLLEGE ALGEBRA | $8 \%$ |
| AMH 2010 | U.S. HISTORY TO 1877 | $3 \%$ |
| ENC 1102 | ENGLISH COMPOSITION II | $3 \%$ |
| ECO2013 | PRINCIPLES OF ECONOMICS MACRO | $3 \%$ |
| POS2041 | AMERICAN FEDERAL GOVERNMENT | $3 \%$ |
| PSY 2012 | GENERAL PSYCHOLOGY | $3 \%$ |
| MAT1033 | INTERMEDIATE ALGEBRA | $2 \%$ |
| SLS1101 | COLLEGE SUCCESS | $2 \%$ |
| MAC1140 | PRECALCULUS ALGEBRA | $1 \%$ |

Source: Education Information and Accountability Services, DOE

## Eligibility for College Credit

 8| 2009-2010 | Total Count | Eligible for <br> College Credit | Eligible at <br> Lowest Score |
| :--- | :---: | :---: | :---: |
| Advanced Placement | 276,290 | $41 \%$ | $3-50 \%$ |
| International <br> Baccalaureate | 23,593 | $83 \%$ | $4-$ \# |
| Advanced International <br> Certificate of Education | 9,304 | $59 \%$ | $\mathrm{E}-24 \%$ |
| Dual Enrollment | $114,470^{*}$ | $94 \%$ | $\mathrm{C}-10 \%$ |
| Source: Education Information and Accountability Services, DOE |  |  |  |

## Acceleration Mechanism Incentives

|  | AP | IB | AICE | $\begin{gathered} \text { IB } \\ \text { Diploma } \end{gathered}$ | AICE Diploma | Total Funding |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 2010- \\ 2011 \end{gathered}$ | 0.16 FTE | 0.16 FTE | 0.16 FTE | 0.3 FTE | 0.3 FTE | \$85,680,456 |
| $\begin{aligned} & 2007- \\ & 2008 \end{aligned}$ | 0.24 FTE | 0.24 FTE | 0.24 FTE | 0.3 FTE | 0.3 FTE | \$101,956,790 |
| Use of Funds | 80\% to school generating funds <br> Teacher bonus | 80\% instructional costs 20\% assist academically disadvantaged students | Teacher bonus |  |  |  |

## Exam and Course Funding 2011-2012

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| Course and Exam | Average <br> FTE | Average <br> Incentive <br> Funds | Average State <br> Contribution |
| :--- | :---: | :---: | :---: |
| AP/IB/AICE Course | $\$ 591$ |  | $\$ 591$ |
| AP Course + Passed Exam | $\$ 591$ | $\$ 560$ | $\$ 1,151$ |
| IB Course + Passed Exam | $\$ 591$ | $\$ 557$ | $\$ 1,148$ |
| AICE Course + Passed Exam | $\$ 591$ | $\$ 554$ | $\$ 1,145$ |
| Dual Enrollment Course | Average <br> FTE- <br> District | Average <br> State Funds- <br> College | Average State <br> Contribution |
| Dual Enrollment <br> (3.0 Credit Hour Course) | $\$ 296^{*}$ | $\$ 263$ | $\$ 559$ |

*Average district FTE per semester-long course
Sources: Office of Funding \& Financial Reporting, DOE
Office of Financial Policy, Florida College System

## Acceleration Mechanisms Current Issues

- Student Performance in Subsequent Courses
- Acceleration Mechanism Funding
- Instructional Materials/Electronic Access Fees
- Online Instruction/Service Areas
- Course/Exam Advising


[^0]:    *Includes only regular high schools that received 1600-point scale high school grades.

[^1]:    *Includes only regular high schools that received 1600-point scale high school grades.

[^2]:    *Includes only regular high schools that received 1600-point scale high school grades.

