

Alternative Methods: Placement into a First College Mathematics Course

Florida Department of Education, Division of Florida Colleges

Florida Two-Year College Mathematics Association Conference

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Agenda

<u>Part 1</u>

An Overview of Alternative Placement Methods

<u> Part 2</u>

Using Data to Advance Placement in Mathematics

<u> Part 3</u>

Q & A



Part 1: Alternative Placement Methods

An Overview

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Standardized Tests and Alternative Methods

- Traditionally, colleges have used high-stakes standardized placement tests to place students into college-level courses.
- Research shows that standardized placement tests used to determine college readiness can exclude students who may otherwise be able to succeed in college-level courses.
- Studies also suggest that alternatives to standardized placement tests may be better predictors of success in college-level courses.
- States and individual institutions across the nation have begun to implement policies that allow for the use of alternative methods to assess students for college readiness.



Alternative Methods Rule Update Review

- In February, the State Board of Education approved revisions to Rule 6A-10.0315, Florida Administrative Code to expand mechanisms Florida College System institutions may use .
- The rule amendment adds the following four categories of alternative methods and their associated minimum standards:
 - Tests and assessments
 - Performance in high school coursework (Florida public high school and accelerated)
 - Credit-by-examination
 - Local placement methods (Form No. ALTPLACE-01) (Not for Dual Enrollment)
- Effective as of March 15, 2022, institutions may use a common placement test or an alternative method approved in rule to assess students for college readiness.



Approved Alternative Methods

Tests/Assessments	High School Courses	Credit-by- Exam	Local Methods (Requires DOE Approval) (Examples Only)
PSAT/NMSQT (PSAT 10)	Algebra 1/Algebra 1 Honors	AP	Institution-derived assessment
PreACT [®]	Algebra 2/Algebra 2 Honors	AICE	Diagnostic tests
GED [®] Test	Pre-Calculus/Pre-Calculus Honors	CLEP	Other standardized assessments
TASC™	Calculus/Calculus Honors	IB	Surveys w/ decision trees
HISET [®]	Geometry/Geometry Honors	DSST	Automated processes based on algorithms
EOC Assessments	Probability and Statistics/Probability and Statistics Honors	UExcel	Guided self-placement
ALEKS [®] PPL	Math for College Algebra		Writing sample
	Math for College Statistics		ACCUPLACER ESL
	Math for College Liberal Arts		
	English 4/English 4 Honors		



Alternative Methods: Implementation Considerations

Alternative Methods allow for local institutional flexibility when establishing for what purposes to use alternative methods, which alternative methods to use, and under which conditions, including the following:

- For what purpose(s):
 - The use of alternative methods for developmental education placement and/or dual enrollment eligibility determinations, or both.
- Which category(s) of alternative methods:
 - Tests and assessments, performance in high school coursework, local placement methods, or more than one.
- Under which condition(s):
 - Flexibility to mix common placement tests with alternative methods (e.g., PERT Mathematics test score and high school English course and GPA).
 - Flexibility to mix different categories of alternative methods (e.g., PSAT Mathematics test score and high school English course and GPA).
 - Flexibility to propose and use a local method.



Placement into a First College Math Course

Regarding student placement into a first college mathematics course, if a student achieves the minimum standards outlined in Rule 6A-10.0315, F.A.C., (common placement test or alternative method), what would that student's first mathematics course be?

- If a student achieved the associated minimum standards in rule, then that student would have demonstrated college readiness, which means that student would not have to enroll in developmental education coursework (ability to bypass developmental education coursework).
- For example, a score of 4 on an EOC assessment (algebra or geometry) would mean that the student is college-ready in mathematics, and it would be a local institutional decision which math course the student would start in beyond developmental education.
- Mathematics Pathways and Guided Pathways may play a role in which first college mathematics course the student is placed.



Part 2: Using Data to Advance Mathematics Placement

Goal: Understand the status quo, including where students are currently being placed and any inequities the current placement system may be perpetuating



Key Questions

- What mathematics courses are students being placed into with the current placement method and who are those students?
- How effective is your current placement method at predicting college-level mathematics course success?
- What potential alternative methods can predict collegelevel mathematical course success with statistical significance?
- What shift in mathematics course enrollment patterns should we expect?



Using Descriptive Statistics: Term I, Initial Placement

Course	# of Students Placed	Black	Latinx	White	Pell- Eligible	Non Pell- Eligible	HS GPA 3.0+
MAT0010	100	50	30	20	80	20	40
MAT0020	80						
MAT1000	40						
MAC1100	100	20	30	50	20	80	60



Common Takeaways

- More students are being placed into developmental courses than are being placed into college-level courses
- Black, Latinx, and socio-economically disadvantaged students are disproportionately placed into developmental education courses
- There are many students with high school GPA above 3.0 that are being placed into developmental courses



Using Descriptive Statistics: Term 2 Outcomes, by Initial Placement

Course	# of Students Placed	# of students who stopped out term 2	# of students who returned term 2 but did not take math	 # of students who returned term 2 but took another math course
MAT0010	100	80	10	5
MAT0020	45	5	35	5
MAT1000				
MAC1100	100	10		
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Common Takeaways

- Students who are placed into the lowest level of developmental coursework stop out at greater rates than those who start in college-level courses.
- Students who start in a certain math course are not continuing their math sequence.



Using Scenario Modeling

- Goal:
 - Understand how enrollment in courses may change if alternative methods are institutionalized
- Data Needs:
 - Student records from the most recent term or other representative term
 - Data points are the course they initially enrolled in, as well as values for all placement methods currently used and under consideration



Using Scenario Modeling (Continued)

Record Number	PERT Score (114)	PreACT (24)	Algebra EOC (4)	High School (3.0 + GPA)	H.S. Course (B or higher)
Student 1	121				
Student 2	120				
Student 3	118				
Student 4	116				
Student 5	112	25			
Student 6	110	25			
Student 7	110	N/A	4		
Student 8	109	N/A	N/A	Υ	Y
Student 9	107	N/A	N/A	Y	Y
Student 10	100	N/A	N/A	Ν	Ν



Alternative Methods Survey Status Update

Response Rate: 57% (16/28 Colleges Responded)

Have already implemented or have plans to implement alternative methods for:

- Developmental Education:
 - 8/16 colleges Tests and Assessments
 - 6/16 colleges Performance in High School Coursework
 - 8/16 colleges Credit-By-Examination
 - 10/16 colleges Local Placement Method

Dual Enrollment

- 8/16 colleges Tests and Assessments
- 7/16 colleges Performance in High School Coursework
- 8/16 colleges Credit-By-Examination









Resources

- <u>Rule Amendment Approval Memo 2022-02-10</u> (PDF)
- <u>Rule Implementation Webinar #1 2022-02-22</u> (Recording)
- <u>Approved Rule Language</u> (Web Link)
- Form No. ALTPLACE-01 (PDF)
- <u>Alternative Methods Toolkit</u> (PDF)
- <u>FLDOE College Readiness Webpage (Link)</u>



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