

TO: Members of the State Board of Education

FROM: Carey M. Wright, Ed.D., State Superintendent of Schools 

DATE: September 24, 2024

SUBJECT: Teacher Licensure Assessments: Adoption of Regenerated Assessment

Purpose

The purpose of this item is to seek approval from the State Board of Education (SBOE) to adopt the regenerated versions of the Educational Testing Service (ETS) Praxis subject assessments for Family & Consumer Sciences (5123) and Technology & Engineering Education (5053). These assessments are regenerated from the previous versions currently adopted in Maryland and align with national standards.

Background

Code of Maryland Regulation 13A.12.01.05AQ(3)(a) states that the SBOE shall approve licensure assessments and the State Superintendent of Schools shall set the qualifying scores. Since 1987, the Maryland State Department of Education (MSDE) has required state licensure tests to assess basic skills, content knowledge, and pedagogy. These tests provide a means to validate that teacher candidates have entry-level skills to begin their professional careers. To maintain currency in various content fields, ETS revises most tests on a five-year schedule and at the same time works to create new tests based on a demonstrated need.

To support the decision-making process when establishing a passing score, research staff from ETS design and conduct two Multistate Standards Setting Studies (MSSS) for each test (25 educators on each team). The two, non-overlapping panels represent and provide a replication of the judgment process to strengthen the technical quality of the recommended passing score. The panelists, selected from states that will use the test, are recommended by the state departments of education to participate as experts for the MSSS. Two Maryland panelists participated in the Technology and Engineering Education (5053) MSSS. No Maryland panelist(s) participated in the Family & Consumer Sciences (5123) MSSS.

The panelists judge the extent to which the knowledge and/or skills reflected by the content specifications are important for entry-level teachers. ETS also collects content-related validity evidence to confirm the importance of the content specifications for entry-level teachers. The recommended cut scores from the two panels are averaged and then converted to a scale score with a range from 100 to 200. This score becomes the recommended qualifying score for the study.

ETS guidelines seek to adopt a score that does not exceed a plus or minus two standard errors of measurement from the recommended qualifying score. In this way, ETS can assure states that they have engaged in a process that ensures the legal defensibility of the score.

Executive Summary

The Praxis Family & Consumer Sciences (5123) and Technology & Engineering Education (5053) assessments have been regenerated from previous versions that are currently adopted in Maryland. ETS is scheduled to remove the older versions of assessments from its catalog on August 31, 2025. Further information about the regenerated assessments, including comparisons to previous versions, is enclosed.

Action

Requesting that the SBOE approve the adoption of the following regenerated Praxis subject assessments for the purposes of teacher licensure:

Test Code	Test Name	Qualifying Score	Scale
5123	Family and Consumer Sciences	151	100-200
5053	Technology and Engineering Education	157	100-200

Attachments

Praxis Overview of Family and Consumer Science Assessment 5123

Praxis Overview of Technology and Engineering Education 5053

Praxis

Family & Consumer
Sciences (5123)



Overview of the Test



Family and Consumer Sciences (5123) is designed to measure knowledge and skills necessary for a beginning teacher of family and consumer science from middle school to high school.

- Aligns to the Family and Consumer Sciences Teacher Standards (NATEFACS) revised in 2018 and the National Association of State Administrators of Family and Consumer Sciences (NASAFACS)





Purpose of Redesign

- To address revised family and consumer science standards

Overall Design Changes

- Revisions to the categories were made to best align with national standards and be most reflective of current practice. This involved prioritizing and organizing the 16 standards into categories.
- Professional Teaching Practices was added and includes the sub-areas, Curriculum and Instruction and Laboratory Management. This content was deemed important by the advisory committee members and through the two external surveys of the field at large.

Standards

- Family and Consumer Sciences Teacher Standards (NATEFACS)
- National Association of State Administrators of Family and Consumer Sciences (NASAFACS)

What has changed?



Previous 5122		Redesigned 5123	
Content Categories	Approximate Percentage of Examination	Content Categories	Approximate Percentage of Examination
I. Food and Nutrition	22%	I. Family, Career, and Community Interrelationships	17%
II. Housing and Interior Design	12%	II. Wellness, Nutrition, and Food Science	21%
III. Textiles, Fashion, and Apparel	12%	III. Human Development and Interpersonal Relationships	18%
IV. Human Development and Interpersonal Relationships	20%	IV. Housing, Interior Design, Textiles, and Apparel	12%
V. Foundations of Family and Consumer Sciences Education	16%	V. Business Skills Across Career Pathways	12%
VI. Resource Management	20%	VI. Professional Teaching Practices	20%

Timing

- Timing has increased from 120 minutes to 130 minutes (2 hours 10 minutes)

Number of Test Questions

- Increased from 120 to 130 selected response questions

Professional Organization

- The National Association of State Administrators of Family and Consumer Sciences (NASAFACS) President participated on the National Advisory Panel (NAC)

Test at a Glance - Family & Consumer Sciences (5123)

Test at a Glance			
Test Name	Family and Consumer Sciences		
Test Code	5123		
Time	130 minutes		
Number of Questions	130 selected response questions		
Format	The test consists of a variety of selected-response questions, where you select one or more answer choices and other types of questions. You can review the possible question types in Understanding Question Types.		
Test Delivery	Computer Delivered		
	Content Categories	Approximate Number of Questions	Approximate Percentage of Examination
	I. Family, Career, and Community Interrelationships	22	17%
	II. Wellness, Nutrition, and Food Science	27	21%
	III. Human Development and Interpersonal Relationships	23	18%
	IV. Housing, Interior Design, Textiles, and Apparel	16	12%
	V. Business Skills Across Career Pathways	16	12%
	VI. Professional Teaching Practices	26	20%

Praxis

Technology & Engineering
Education (5053)



Overview of the Test



Technology & Engineering Education (5053)

is designed to measure knowledge and skills necessary for a beginning teacher of technology and engineering in a secondary school.

- Aligns to the International Technology and Engineering Educators Association, *Standards for Technological Literacy 2020*





Purpose of Redesign

- Standards updated in 2020

Overall Design Changes

- Combined the content in categories from 5051 to be one category on 5053. There was also a reduction in the knowledge and skills of similar content by grouping content being assessed and removing content that is no longer a focus for a beginning educator in this field.
- There was a reduced emphasis on Transportation and Logistics and an increased emphasis on Computation, Automation, Robotics, and Evolving Technologies.
- Due to the reorganization of the Categories, the weightings were redistributed.

Standards

- *Standards for Technological Literacy 2020*

What has changed?



Previous 5051		Redesigned 5053	
Content Categories	Approximate Percentage of Examination	Content Categories	Approximate Percentage of Examination
I. Technology and Society	15%	I. Fundamentals of Technology and Engineering	25%
II. Technological Design and Problem-Solving	20%	II. Design and Application of Products and Systems	21%
III. Energy, Power, and Transportation	15%	III. Technology Contexts 1: Energy, Materials, and the Built Environment	16%
IV. Information and Communication Technologies	15%	IV. Technology Context 2: Information, Computation, and Technological Applications	16%
V. Manufacturing and Construction Technologies	15%	V. Pedagogy and Professional Responsibilities	22%
VI. Pedagogical and Professional Studies	20%	N/A	N/A

Timing

- Timing remains the same at 120 minutes

Number of Test Questions

- Number of questions remains the same at 120

Professional Organization

- International Technology and Engineering Educators Association (ITEEA)
- International Society of Technology in Education (ISTE)

Test at a Glance – Technology & Engineering Education (5053)

Test at a Glance			
Test Name	Technology and Engineering Education		
Test Code	5053		
Time	120 minutes		
Number of Questions	120 selected response questions		
Format	The test consists of a variety of selected-response questions, where you select one or more answer choices; questions where you enter your answer in a text box; and other types of questions. You can review the possible question types in Understanding Question Types .		
Test Delivery	Computer Delivered		
	Content Categories	Approximate Number of Questions	Approximate Percentage of Examination
	I. Fundamentals of Technology and Engineering	30	25%
	II. Design and Application of Products and Systems	25	21%
	III. Technology Contexts 1: Energy, Materials, and the Built Environment	19	16%
	IV. Technology Contexts 2: Information, Computation, and Technological	19	16%
	V. Pedagogy and Professional Responsibilities	27	22%